Health care professionals` experiences with the implementation of The Coordination Reform at a University Hospital in Norway.

- A qualitative study.

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Abstract

Introduction: The Coordination Reform was implemented January 1. 2012 in Norway with a changed distribution of tasks and responsibility between the primary health care and the specialist health care. For the specialist health care the aim was to concentrate to a greater extent on their specialized tasks.

Aim: The aim of this study was to examine how health care professionals in a university hospital have experienced the implementation of the Coordination Reform.

Method: Three focus group interviews and 3 individual interviews with nurses, doctors and leaders were conducted. Data was analyzed by using systematic text-condensation.

Results: Lack of information within the hospital concerning the Coordination Reform made the informants feel unprepared for the changes that followed, especially in terms of the new guidelines for notifying the municipalities about patients in need of municipal follow-up after discharge. The informants experienced an increased focus on economy, because errors in the notification process led to less income for the hospital. The impression among the informants was that patients without complex care needs were faster received by the larger municipalities, unlike those with complex care needs. According to the informants this further affected their work in relation to use of resources.

Conclusion: The aim for the specialist health care to focus more on their specialist competence and an improved coordination with the primary health care has not yet been achieved according to the informants in this study. They felt that different professional perspectives and lack of ICT-solutions were the biggest challenges in the coordination.

Relevance: This study indicates that there is a further need for examining health care professionals in relation to the implementation of the Coordination Reform. One interesting aspect concerns the hospitals and specialization – More specialization or are they specialized enough: What is the right direction in terms of the patients and the health care professionals? Another aspect is the work with developing patient pathways and ICT-solutions - what are the effects on communication between the hospitals and the municipalities?

Introduction

A review of the health system in Norway (Ringard et. al 2013) shows that the Health Reforms implemented in the last forty years have had different focus and outcome measures. In the 1970`s the focus was on equality and increased geographical access to health care services. Health reforms in the 1980`s were directed towards cost-containment and decentralized health services. During the 90`s the focus turned towards efficiency. In the first years after 2000 structural changes in the delivery and organization of the health care system was emphasized in addition to policies meant to empower the patients and users. In the last years however efforts have been made to improve the coordination in addition to an increased focus on the quality of care and patient safety issues.

One of these recent health reforms was introduced by the Minister of Health in 2008-2009 in the white paper "The Coordination Reform – the right treatment – in the right place – at the right time" (Helse- og omsorgsdepartementet 2008-2009). It was directed towards the future challenges in the health care system in Norway (Helsedirektoratet 2012). It describes a situation with a growing number of elderly people, an increasing number of people with diseases and changed clinical manifestations into more complex states of disease (Helse- og omsorgsdepartementet 2008-2009), Helse Midt-Norge 2013) and that new treatment options would be rapidly introduced further inducing an increasing need for specialist health care services. The White paper also described that too little effort was made to limit and prevent disease in the current health system and that there was lack of coordinated services (Helse- og omsorgsdepartementet 2008-2009, Ringard 2013). Furthermore, the use of resources on health care services in public sector was great and growing and the need for more cost-effective solutions to keep this growth under control was apparent (Helse- og omsorgsdepartementet 2008-2009, Westeren et. al 2012).

Some of the main actions in the Coordination Reform which were planned to be implemented during 2012 were (Helse- og omsorgsdepartementet 2008-2009):

1. Developing more coherent and better coordinated patient pathways to ensure the patient`s need for coordinated services and to improve the coordination between the different health care providers, i.e. the primary health care and the specialist health care.
2. The municipal role was to be changed towards a greater focus on early intervention and prevention and thereby preventing and reducing the need for hospital admissions

(Westeren 2012, Romøren et. al 2011). This would require upgrading of the local service and competence upgrading for the employees, and here the hospital had an important guiding responsibility (Helse Midt-Norge 2013).

3. A municipal co-financing of specialist health care services and a municipal financial responsibility for patients ready for discharge from hospitals were established to stimulate the municipalities into preventing hospitalization.

4. The specialist health care system was to focus more on their specialist expertise, e.g. apply the resent technology- and methodology within medicine and health sciences (Helse Midt Norge 2013).

5. Competence development among health care professionals and a development within ICT (Information and Communication Technology).

When assessing the effect of the implementation of new health reforms and guidelines, it has been found that efficiency and reduced costs are the main outcome measures (Bauer 2010, Van Herck et.al 2010). There has been less focus on patient satisfaction and the health care professionals' experiences with the implementation. Two studies have examined work-satisfaction after implementation of specific health reforms (however these focused only on doctors and not health professionals in general), and their findings were contradictive and not conclusive (Aasland et. al 2010, Perneger et. al 2011). One of them reported that the implementation of two reforms had little impact on the satisfaction measurements among doctors (Aasland et. al 2010), while the other reported that job satisfaction among doctors had sharply decreased as the new policies were being implemented (Perneger et. al 2011). Another study, also examining the experience of hospital doctors, showed that the rapid adoption and introduction of The Hospital reform in Norway in 2002 led to massive opposition (Martinussen et. al 2011).

The success of a reform is said to depend on how clinicians and administrators interpret the problems that the reform addresses and how they understand their own role (Martinussen et. al 2011). Studies show that change is most effective when it occurs through the long process of altering the profession (Martinussen et. al 2011, De Allegri et.al 2011): Changes in legislation and incentives must be followed by changes in organization and leadership. In addition these changes must be approved by professional health workers in general, and not only by those with leadings positions.

Health care professionals have a central role in the implementation of reforms by being the actors that put the reform into practice. They are governed by a desire to offer high quality health service, but they can be reluctant to change the professional behavior that is needed when complex interventions are to be implemented (Treweek 2005). Although there is a lack of studies on their experiences with the implementation of larger reforms, there is some literature on implementation processes in hospitals that have included the health care professionals experiences (Bayley et.al 2012, Cresswell et. al 2011, De Allegri 2011, Lauvergeon et.al 2012, Spetz et.al 2012). These studies have been conducted abroad within different health systems and in addition these have been directed towards specific interventions and processes like implementation of clinical guidelines (Bayley et. al 2012, Lauvergeon et.al 2012), ICT-systems (Cressvell et. al 2012, Spetz et.al 2012) or patient pathways (De Allegri et. al 2011). They have identified the following barriers to implementation (French et. al 2012, Spetz et. al 2012, Bayley et.al 2012): Lack of knowledge and competence among employees, equipment deficiency, shortage of time, organization culture or structure, beliefs/attitudes, the role and autonomy of health care workers, the absence of staff involvement, resistance towards change and altered practice, and management culture.

Research concerning the Norwegian Coordination Reform is scarce and especially so in terms of its effect on health care professionals. A few studies have examined health care workers in the municipalities (Grimsmo 2013, Gautun et. al 2013), but none have been examining the experiences of health professionals working in the hospitals. Considering the size of the intended changes in the Norwegian health care system due to the Coordination Reform and the lack of research concerning the reform, there is a need for studies that examines how health care professionals in hospitals in Norway have experienced the implementation of the Coordination Reform. The aim of this study was therefore to examine:

How have health care professionals at a university hospital experienced the implementation of the Coordination Reform?

Methods

Design

A qualitative study was conducted by using focus group interviews. Focus group interviews are useful for obtaining information about social group's interpretations, interactions and norms (Halkier 2008). Health care professionals in hospitals work in teams and the teams may differ from each other in terms of perceptions and experiences relating to the same phenomenon. It was therefore deemed appropriate to explore health care professionals shared experiences around the Coordination reform in group interviews.

Setting

In Norway the hospitals, general and university, are owned by the government. The country is divided into four hospital regions that each has a regional health authority. Primary care services, home-care services, nursing homes and community hospitals are the responsibility of the local authorities in the municipalities.

St. Olavs Hospital in Trondheim, Norway, is a University Hospital for Mid- Norway serving 702 869 inhabitants. It also functions as a local hospital for the 306 197 inhabitants in the county Sør Trøndelag (25 municipalities). Trondheim, the city in which the hospital is located, is also the largest municipality in the region. The hospital has 9584 employees and 1008 hospital beds and is further divided into clinics, divisions, departments and sections with corresponding leaders. The clinical activity is organized into 19 clinics and divisions based on area of responsibility and diagnostic field (St. Olavs Hospital 2014). Most clinics are subdivided into one medical ward and one surgical ward, corresponding outpatient clinics, an intensive care/recovery unit and a unit for surgical activity. The wards are the connecting link in the patient pathway during hospitalization and are responsible for diagnosis, treatment and care for the patient, including the discharge process.

Participants

Since the wards are the connecting link in the patient pathway during hospitalization and have a responsibility for the coordination between the hospital and the municipalities regarding patients, it was essential to select health care professionals from the hospital wards for this study. It was therefore decided to include informants from one of the clinics at the hospital. The selection criteria were: 1. Affiliation to medical or surgical ward within the clinic, 2. Being a nurse, a physician, or a leader. 3. Having experience with the introduction of the

Coordination Reform in the hospital meaning that they had to employed in a hospital since 2012. The aim was to get as much variation in the sample as possible within these settings.

The informants were then selected strategically based on the author`s prior knowledge of them as coworkers at the same clinic. The informants with leadership responsibility were chosen on the basis of their field of responsibility: head of the ward, head of the department or head of the clinic. Six nurses, three junior doctors, two senior doctors and five leaders were asked to participate both formally by letter and by oral request.

The final sample consisted of 12 informants; 6 nurses, 2 senior doctors, 1 junior doctor and 3 leaders. In total there were 8 women and 4 men aged 25 – 64 years. Five of the participants had affiliation to the surgical ward and seven to the medical ward. The professions nurse, doctor and leader were represented from each ward. All informants expect one had been working at the same place, in the same profession and the same area of responsibility since before the Coordination reform was introduced.

Data Collection

The sample was divided into three groups for the interviews. The first group contained health care professionals with personnel- and leader responsibilities: the head of the clinic, the head of the medical department and the head of the medical ward. The second group included junior and senior doctors from the surgical and medical department, while the third group consisted of nurses from both departments. One of the reasons for this division was to secure data from health care professionals with different area of responsibility and thereby obtaining the whole range of experiences they have concerning the implementation of the Coordination Reform. The second reason was to create a safe environment in the interview groups that was not influenced by the hierarchical division which often guides the hospital activities.

In the autumn 2013 two semi structured individual interviews with two nurses, one focus group interview with four nurses and one focus group with two doctors were conducted. One doctor participated in a semi structured individual interview in the spring 2014 due to work plans and time issues. The interviews with the doctors and the nurses were conducted after their shift had ended or in their spare time. The interviews with the leaders were conducted during spring 2014 and in their work time. The interviews were performed, audio recorded and transcribed by the author.

Based on my knowledge as a health worker, previous literature and discussions with supervisors I made an interview guide. The interview guide started with an open question: "How have you experienced the implementation of the Coordination Reform here at the hospital?" and then the informants were asked questions related to the following themes if they did not spontaneously speak about them: Knowledge about and experiences with the Coordination reform, changes in work-related tasks, the process of implementation, motivation to follow new procedures, promoting factors and barriers for implementation, coordination with the municipalities, and economic and the role of the health professional.

Data Analysis

Systematic text condensation developed by Kirsti Malterud and based on work by Giorgi was used (Malterud 2011). This method consists of four steps: 1. Read the transcription, get an overall impression and write down preliminary topics. 2. Identify meaning units e.g. text that carry knowledge about the preliminary topics, code and organize them under the preliminary themes found in step 1. 3. Divide the meaning units in every code group into subgroups. Abstract the contents and make condensates. 4. Summarize the knowledge comprehended in each subgroup and condensate and transform this knowledge into descriptions and concepts about the phenomenon that is being investigated.

Based on this the data analysis was conducted in an iterative manner:

Step 1 and 2: The overall impressions were summarized in preliminary themes and the meaning units were organized under each of these themes. Some overlapping occurred, because different meaning units adapted to different themes. During this process almost all of the meaning units were kept as entire quotes to make sure context was not lost. Throughout this process discussions were made with the responsible supervisor and the themes were refined into seven preliminary themes: Patients ready for discharge, The Implementation, The municipality, Specialization, Theory (theoretical knowledge), Economics and the professional role, and Patient Pathways.

Step 3: The content in each theme was further divided into sub groups, and condensates of these were made. That involved to a great extent gathering quotes that illuminated the same subgroup. Within several of the subgroups common features were identified among informants, but also different opinions within professions and between professions regarding the same theme. This was also the reason why several of the quotes were just gathered instead of making complete condensates to further ensure full control over who said what of the

informants. In addition quotes that best illuminated the subgroups were selected. An overview of the most important statements and themes relating to the research question was also made, to create a better organizing of the content.

Step 4: Then complete condensates were written in 3.person point of view. The decision to keep the quotes made it easier to draw out common features and differences within the professions, between the professions and between the two wards. The condensates were initially structured according to: the experiences of the nurses, then the experiences of the doctors and last the experiences in management. Differences in opinions concerning the same theme within professions and between professions were gathered in an own paragraph. Preliminary headings for the different subgroups were made to keep them apart and to get a better overview over the contents in each of the groups. During this process discoveries were made in terms of themes that did not give new information and themes that did not provide enough information to stand as an individual theme. That led to some of these being deleted or merged into other themes. For example the initial theme; Theory, that included the informants` theoretical knowledge of the Coordination Reform, was deleted. "Specialization" was merged into other themes. One of the themes; "Patients ready for discharge" was divided into further themes because of its different aspects that made a more detailed division necessary. The condensation and transformation process performed in step four was revised several times and discussed thoroughly with two supervisors. The transcriptions were checked continuously during this revision.

Ethics

Since this study did not include research on health and disease it is not governed by the law of health research. Approval from REK (the Norwegian "Regional Committee for Medical and Health Science Research Ethics») was therefore not necessary. In the beginning of the interview the informants were informed that their statements were to be handled anonymously. The informants were also informed that they could withdraw from the study or withdraw statements from the interview at any time. The participants got a written consent form prior to the interview where the goal of the study, handling of the data, audio recording and anonymity was accounted for. When transcribing the interviews each informant got a codename: Medical doctor 1(MD1), Surgical doctor 1(SD1), Nurse 1 in medical ward (NM1), Nurse 1 in surgical ward (NS1) and Leader (L1). Data was stored on a private computer protected by a password. Names connected to occupations were kept in a file separate from

the transcriptions. To further protect the anonymity of the informants the name of the clinic was left out. The audiotape was deleted after transcription.

Results

During the data analysis the results were categorized into eight themes. The first theme was "The Implementation of the Coordination Reform" describing how the informants experienced the introduction of the Coordination Reform. The second theme was "Changed guidelines concerning patients ready for discharge" describing the change of routines for notifying municipalities. The following themes: "Increased focus on economy and bed day differences", "Perceptions of the larger municipalities", "Coordination with the municipalities", "The exchanging of information" and "The experiences related to the patients ready for discharge within the hospital" illustrates among other some of the experiences concerning the effects of the routines for notifying municipalities, the effects of the Coordination Reform and the different challenges for coordination. The last theme; "Patient Pathways" describes the development and thoughts regarding patient pathways within the hospital.

The implementation of the Coordination Reform

The Coordination Reform was implemented January 1. 2012. All the nurses consistently answered that information within the hospital concerning the introduction of the Coordination Reform was scarce. They had expected more information concerning its background, planned changes and what it would entail. The doctors remembered reading in the media that the reform was coming, and one of the doctors believed she had received an e-mail concerning this right before Christmas in 2011. Beyond this, no information was received from management and the doctors did not really know what the Coordination Reform would imply for them or the hospital. One of the leaders said he had a vague impression of the reform and what it would entail for him at departmental level, despite his efforts of obtaining overall knowledge of the reform and its intension. The leaders said that the hospital had employed a director for coordination that was meant to work on the reform and its implementation. According to them there were few concrete messages from the Director of coordination and others in the hospital management on how to relate to the reform, except for one letter informing them of changed guidelines concerning patients ready for discharge. It was up to them how to further convey these guidelines to the employees.

> *In that way this has been a reform that kind of has been floating around and then information has been passed to us, partly internal and partly external, but it has not been very tangible* (Leader 2).

In the interview with the leaders it was said that there was no direct plan for implementing the Coordination Reform. They meant that the Coordination Reform ought to have been put into action in a more specific way and further that the Director for coordination ought to have made sound plans to ensure this. One of the leaders listed lack of faith in the Coordination Reform among the top management as the main cause why concrete plans were not made:

> *But they themselves* [top management] *had no faith in it. That was the message they were putting out. They had no faith that this was something that was going to catch on, because it was so unclear for everyone… No one was able to make any plans… Because every meeting was about: "this is what`s desired and this is the intention, but we don`t know whether we are going to make it, and we don`t know whether it will be like that". When people lack faith in it but still advocates it, it gets harder to convey further down that they too shall have faith in it.*

Although the nurses felt that information concerning the Coordination Reform was scarce, they pointed out that they themselves had a responsibility for acquiring information, but it was not always easy achieving this in a busy workday. Especially, if the information was distributed only on the hospital`s intranet. They felt it was difficult to know what information to sort out and determine what information that was essential to acquire.

> *…but when you think of all the things you are exposed of as doctors and nurses, we are meant to know everything and monitor everything. We are not capable of doing that. Then we become selective. ... You can`t be bombarded with a complete book of information. It has to be like, it has to be practical, a practical cookbook in a way; what is expected, which tasks are we given, what are we supposed to do and how are we going to do it* (Doctor 2, surgical ward.)

Changed guidelines concerning patients ready for discharge
The first response to the initial question about what changes the Coordination Reform had led to in practice, the changed guidelines concerning the patients ready for discharge was highlighted immediately. A description of a patient ready for discharge was:

> *If a patient needs follow- up care after discharge from the hospital, then it is the municipalities that are supposed to take over the care, thus, from that day we mean that treatment is finished, we register the patient as 'has completed treatment' and*

then it`s the municipality that pays for the patient while he`s in the hospital until they have capacity to take over the responsibility for the care (Nurse 1, medical ward).

The new guidelines were effectuated at the same time the Coordination Reform was officially implemented. They expressed that within 24-hour of admission the municipalities had to be notified if a patient was in need of municipal care after discharge, also called "24-hour notification" by the informants. According to the nurses the 24-hour notification had to include the following information: name of the patient, care needs, assumed pathway within the hospital and expected time for discharge. The nurses explained that the content of the 24-hour notification was usually exchanged over the phone and this task was performed by the nurses. The physician`s task was to write a summary thereby documenting what has happened during hospitalization and that the patient was ready for discharge. The doctors were of the opinion that the nurses had instructed them in this task. The nurses remembered that these changed guidelines were introduced without notice and they felt that the changes were imposed on them from above, i.e. top management and clinic management. In addition most of them were of the opinion that no guidance were given in performing the guidelines and that they were self-taught through the concept of "learning by doing" or by asking colleagues for help.

Some months after the Coordination Reform was implemented, the municipality in which the hospital is located as the first of the municipalities in the region introduced a solution that involved the 24-hour notification being conveyed via e-messaging. The e-messaging solution was integrated into the hospital`s internal electronic medical records. In addition to a form in which the contents of the 24-hour notification was to be filled in, there was a separate form for scoring the patient`s level of functioning in relation to activities in daily life (ADL). The nurses were under the impression that some form of training had been given in relation to the part of conducting the e-messaging, but this had been after the system had already been implemented and had not included the additional scoring system for ADL. They described the training as "someone who came to show them during work day". This way of educating was not deemed by the nurses as either appropriate or successful during a busy work day:

It came sudden, at least for the training-part, because all of a sudden there was a lady there, for my part at least, who said: "now you`re going to learn about 24-hour e-messaging". I had not heard anything about e-messaging (Nurse 1, surgical ward).

The nurses told that they to a great extent had taught themselves to conduct e-messaging by using templates that was handed out, by calling the representatives from the department of coordination or with help from colleagues. The physicians in addition to writing the summary were meant to store and approve the form for the 24-hour notification on the computer which the nurses later filled out and sent. The doctors said that they also in this regard have been instructed by the nurses:

> *We teach the doctors how to do this every time. "And then you press here, and then you press here, and then you press here, thank you very much and goodbye". Then you are allowed to start writing yourself* (Nurse 2, surgical ward).

The nurses told that based on patient information provided by them through the 24-hour notification i.e. by phone or e-messaging, it was up to the municipality to decide what municipal follow-up the patient was to receive.

> *No. We are not supposed to tell that he* [the patient] *has a need for or that he shall have a stay in the nursing home. We are not supposed to say that. ... I was criticized for* [doing that once, by the municipality] (Nurse 3, medical ward).

The municipal service was reported by the nurses to include the following: home nursing care, short-term stays at nursing homes with assessment of care needs or rehabilitation. They said that when the municipality had decided what municipal service the patient was to receive, the nurses would use another electronic system (PAS) to register whether the patient was to be discharged to a nursing home or a rehabilitation facility. This registration settled that the municipalities now had the financial responsibility for the patient until they were capable of taking over the medical responsibility and care of the patient.

It was the physicians' task to make the assessments whether the patient was ready for discharge from the hospital. According to the doctors these were assessments based on clinical considerations and the implementation of the Coordination Reform had no impact or significance concerning this consideration. The doctors said that no written guidelines existed to council them and that it was up to each of them to make this assessment. According to the doctors general characteristics of patients ready for discharge were: "stable patient", "back to habitual state" and "as well as they can get without further treatment".

> *I am not under the impression that we discharge someone before it is justifiable… But I know that some of this has been covered in the media, saying that they are being*

discharged to soon and that they demand some advanced treatment and so on, but I am not under the impression that this is something happening from our ward in any case (Doctor 1, medical ward).

Increased focus on economy and bed day- differences

After the implementation of the Coordination Reform and the following guidelines the nurses experienced a pressure from the management regarding the patients ready for discharge.

As I recall, in terms of the municipal contact, it was important that the patients were registered. In a way we had to get our act together in terms of… if they were classified as "had completed treatment" then they had in fact completed treatment. We had to be more offensive at the ward regarding the process of diagnosing the patients [e.g.] *have an early assessment, do they need something, what do they need. In a way it became more systematic or our physicians got pressured into making decisions* (Nurse 2, medical ward).

The nurses felt there became an increased focus on economy involving these patients:

Then it was the sudden focus on money, and that we were not prepared for at all beforehand that this was actually something we could lose money on. Then suddenly a couple of months later we receive the message that the clinic as a whole…, had lost so and so many hundred thousand in so and so short amount of time. You were lying sleepless because you hadn`t done this the right way, you know (Nurse 1, surgical ward).

The nurses felt that they all of a sudden had to start thinking economics in the process of handling the patients ready for discharge. The hospital lost money if there were formal errors in the 24- hour notification or registration. Especially after the implementation of the e-messaging, many nurses felt responsible for the fact that the unit lost money because of these errors. When the nurses in addition experienced the e-messaging solution as both cumbersome and not user-friendly, the frustrations increased.

Then of course there is always someone who is more stressed out by such things than others, but then I figure, if the hospital doesn't get the money it`s supposed to and their systems are to poorly designed to make us register, then it`s actually theirs problem; the hospital management, at least that is what I think. And then if they see that things are not being done properly, that too little money is earned, then they must

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be the ones who change something. It can`t be the particular nurse or doctor in each ward who takes on that responsibility, is what I think (Doctor 2, surgical ward).

After the implementation of the Coordination Reform every informant noticed that the condition of a patient ready for discharge would impact the time needed by the municipalities to take over the patient. A dividing line appeared between those who were considered "easy" i.e. had uncomplicated care needs, and they who were considered "complicated" i.e. had more resource- demanding and complex needs. The informants experienced that the "easy" ones were faster received by the municipalities, often within few days. The "complicated" ones were admitted longer, from weeks to months, but this experience was only connected with the larger municipalities. The overall impression among the informants was that the smaller municipalities were quicker to receive patients ready for discharge, no matter how complex their needs were.

Perceptions of the larger municipalities

The nurses thought that the reason why "complicated" patients waited longer to be received by the large municipalities was partially due to financial priorities.

… and I strongly suspect the municipality for delaying with purpose, and they have partially admitted this as well, because it`s cheaper to have them here and pay fees per day, than for themselves to increase staffing (Nurse 1, surgical ward).

But the nurses also had the impression that it was partially due to lack of competence as well. The lack of competence became visible when the municipalities were to receive complicated patients and their health care workers felt insecure on how to handle it. In addition they thought that there was a misguided belief in the larger municipalities concerning what these patients really were in need of. According to the nurses it was often a matter of staff training, and in many cases little nursing resources would be needed. They further told that the wards often offered the municipality's employees training regarding the "complicated" patients.

The management was of the opinion that "complicated" patients waited longer for municipal service because the larger municipalities had several more institutions to distribute the competence to:

There are a lot more institutions to allocate [the competence on]. *If you compare with* [a smaller municipality] *which we had a very good experience with, they had a nursing home and had managed to center the competence in this nursing home. Then*

> *it`s easier to receive a complicated patient like that, than if the same patient, on several other locations in* [in a large municipality] *which has so many more institutions to relate to* (Leader 3).

The nurses felt that especially the largest municipality had not yet developed enough competence to reach the goals of the Coordination Reform. When taking the "complicated" patients out of the equation, the nurses still had a general impression that there was a lack of competence in these municipalities. They noticed the lack of competence through unnecessary hospital admissions especially for those patients that were receivers of home nursing care. The nurses felt that the municipality could not handle the challenges concerning the patients, even though the hospital admissions were seen as unnecessary from the hospital`s point of view. According to the nurses there were seldom changes in the patient`s condition and the need for further examinations or treatment were not present. Sometimes it occurred that patients were admitted because they themselves felt unsafe in the situation they were in at home.

> *But sometimes when they are admitted because they haven`t eaten in the last two days or they haven`t manage to defecate, well, we have to insert enema then, but this they could have done there as well. You don`t have to be admitted in hospital because you are constipated* (Nurse 2, medical ward).

Some of the informants still pointed out that establishing a department for palliative care and an emergency department in the municipality where the hospital is located was a competence enhancing measure. They thought that these measures would lead to a spread of competence within the municipality.

Another nurse was of the opinion that the municipalities should have been given more time to adopt and to create appropriate local services before implementing the Coordination Reform. According to the nurse the goal of the reform was financial and by reducing hospital admissions the intention was to close down hospital beds and thereby reduce expenses. The nurse did not think that the largest municipality still had the capacity that was expected to make this a reality. Even though hospital admissions were to be reduced, the nurse thought that the hospital by being specialized into different units, the reduction of one single bed per unit would not be cost efficient because the staffing level would still be the same in each of the units. The nurse reported that to reduce costs whole sections of the wards had to be closed down and staffing reduced accordingly and for this to be realized the municipalities needed

institutions more capable than the nursing homes. The management also shared the opinion of the nurse concerning what the municipalities would need if the intention was to reduce hospital admissions, and they highlighted district medical centers as an example.

The coordination with the municipality

When the nurses described the coordination between the hospital and the municipalities, they agreed that it had evolved to an increasing disagreement over money. Especially this was the case for the municipality in which the hospital was located. The dispute over economy manifested itself in the process of notification and registration related to the patients ready for discharge, and it became most visible when it concerned the "complicated" ones. The management shared the nurses` opinions in regards to the not improved coordination with the municipality in which the hospital is located.

> …"we are losing money", then it feels like you are almost, you are almost in a battle with those people there [in the largest municipality]. It`s not cooperation as it is meant to be. You feel that there`s someone sitting there that virtually do their best to cheat you, some of the times. It`s kind of like they are cheating you for a lot of money. ... Cause it`s not like we don`t want to. We do want to have a good cooperation with the municipality and we do wish to have a good flow (Nurse 2, surgical ward).

The doctors did not notice any increased form of cooperation with the municipalities after the implementation of the Coordination Reform. They found it difficult to have elaborative opinions regarding this since they did not have as much direct contact with the municipalities compared to the nurses. It was contact driven by need. However, they found it positive for the coordination that electronic referrals with attached medicine lists were introduced, but the doctors as well had noticed that there were increased discussions between the hospital and the largest municipality regarding the notification process.

> That it is only nit-picking, a search for law-compliance, without it having any practical consequence. If you did in fact forget [to write] that he is in a wheelchair, that he is angry and acting out, if you haven't said anything, if you hold back or deceive or things like that, or you didn't give the information that was needed, then of course something new must be established or that things have changed. But if it`s only formal errors, then it feels so meaningless (Doctor 2, surgical ward).

The nurses had the impression that the e-messaging solution was time- and resource saving for this exact municipality, because they to a lesser degree had to seek out to the hospitals for assessments-visits. Prior to the Coordination Reform, it was, according to the nurses, common practice for staff from this municipality to visit the hospital wards and assess the patient`s need for municipal follow- up. All the informants argued that the municipality had relocated these resources to employ two people in fulltime positions to search for formal errors in the e-messages sent from the hospitals:

> *There`s not any smooth operating or that we work in teams, it`s more on the contrary. ... And it seems like they have rigged themselves with a bureaucracy in which they have capacity to sit and carefully read all the processes and then strike back, every time they have the chance, to avoid paying* (Leader 2).

The informants told that in some cases there had been disagreements between the municipalities and the hospital regarding the post-discharge needs of the patient. It could be that the hospital was of the opinion that the patient needed 24-hour care while the municipality opposed this and decided that the patient was to receive home nursing care instead. The fact that the municipalities were supposed to have the final saying in what municipal service the patients were to receive was according to one of the nurses in the surgical ward stated in law:

> *...we have notified patients for rehabilitation and meant that that they have been I need for that, and they have said: "no, he`s to receive nursing home care". ... I know it`s stated in law that they have every right to do just that, but it surprises me nevertheless* (Nurse 1, surgical ward).

Although stated in law, the nurses and doctors found it strange that case workers in the municipalities could disregard an assessment made by a senior doctor at the hospital, especially since the patient in fact was under treatment in the hospital and hospital- employees at that time knew the patient best:

> *And then you feel that they over- run you. It`s them that are supposed to decide whether the patient has a need for a higher degree of care or not, when we say he has. Then it`s some frustration and "here there is a lot of coordination going on"* [ironic] (Doctor 1, medical ward).

The nurses thought that a lot of the reason why the largest municipality chose to overrule the hospital was based on economy and the scoring of the patient`s level of functioning in the 24-hour notification form. If they scored to low a score regarding the patient`s need, it did not qualify for 24-hour care. One of the nurses had experienced that the municipality had to change their decisions in retrospect, so it became in line with the hospital`s. In other cases it had led to re- admissions because the patient could not function at home.

The exchanging of information

The exchanging of information between the hospital and the municipalities was especially by the nurses and some of the leaders found to be challenging in terms of the coordination. For the nurses these challenges became prominent because of a different understanding between the two organizations, i.e. primary health care and specialist health care, regarding the contents of information to be exchanged:

> *We are so specialized here. For us it`s so obvious. It`s the same as when we retrieve the patient in the ICU* [Intensive Care Unit] *and they begin with: "have gotten so and so much Propofol* [a anesthetic sedative] *and have slept on gas and" and then I put on my intellectual expression and let them finish up. But they don`t really give me what I want. They give me what they want to give. And I probably do the same thing as well, when passing on the information. I give away what I feel is important and what I would have wanted in return, but maybe I don`t give what information they want* (Nurse 1, surgical ward).

One of the nurses also commented on the fact that the hospital and the municipalities had different systems for medical records that did not intertwine and further created challenges in the coordination. One of the leaders was of the opinion that ICT-solution had to be created at regional or national level to make a common platform that would lead to a better communication and coordination between the different care providers. For him development within ICT-solutions had become one of the most important measures to improve coordination between primary health care and the specialist health care:

> *Why is it so that many years after the Minister of health said that: "now we are going to establish platforms for coordination and improve coordination between primary- and specialist health care", we still feel that we have not made it. And an important factor which is not yet in place, its ICT. We don`t have electronic solutions for*

> *communicating with the municipalities directly, both in terms of referrals and discharge* (Leader 2).

Although the nurses themselves did not feel that the e-messaging improved the coordination with the municipalities, feedback from nurses in the municipalities reported that they were of a different opinion. The nurses in the municipalities saw the advantage of accessing information on the patient prior to discharge from the hospital trough e –messaging. The nurses among the informants therefore hoped for better communication in return – with written information- when patients in municipal care were admitted.

Experiences related to the patients ready for discharge within the hospital

The actual work relating to the notification of the patients ready for discharge demanded nursing- resources, and the nurses reported spending a lot of time in front of the computer or over the phone. On questions concerning which of the two ways of conveying the 24-hour notification was most demanding, according to time and resources spent, they first said the phone. But after some considerations they came to the conclusion that time spent on e-messaging in sum could be just as time consuming. Several ten-minute periods could be spent, sending messages back and forth, especially when the messenger and receiver had different understanding of the contents. Concerning the patients with complicated care needs, the e-messaging was not seen by the nurses as effective, and a lot of the messages that were sent back and forth included discussions whether the e-messages were correctly filled in or not. In cases like these, the nurses experienced that contact over the phone was safer in terms of ensuring good quality in the process of exchanging information.

The nurses felt that the provision of care for the patients ready for discharge and especially the "complicated" ones demanded a lot of their resources as this patient group needed more supervision, care and help compared to the other patients admitted. This was time and resources that nurses felt were taken from the patients admitted for examinations and treatment. Even though the nurses also prior to the Coordination Reform had been responsible for the care of patients ready for discharge, they told that the use of resources was even more visible after the reform due to increased length of stays in the wards regarding the patients that had complicated needs. It was especially apparent when these patients were disoriented, confused and demented. They demanded time, patience and constant supervision especially when restless and aggressive. The doctors had also noticed that the actual care of these patients took up a lot of the nurses' resources.

> *It`s not a good feeling when you can`t leave, because then you are afraid she is going to stumble out of bed and fall and injure herself and not knowing in which condition you will find her when you return. At the same time you have other patients to attend to* (Nurse 4, medical ward).

After the implementation of the Coordination Reform the informants noticed that patients ready for discharge to a greater extent than before were being transferred within the different hospital wards because of lack of bed capacity in the unit in which they originally were admitted. The experiences among the informants regarding this practice of transferals were different. Nurses in the medical ward said that due to a generally large turnover in the ward they often received transfers of patients ready for discharge as soon as they had bed-capacity. Nurses in the surgical ward said that in the months prior to the interviews they had received such transfers to a lesser degree than earlier. The reason for this, the nurses told was that the person in charge for the distribution of patients at the hospital, the distribution- coordinator, to a greater extent did distribute patients ready for discharge to the medical wards. One of the doctors in the surgical ward shared this experience, while the other did not. The second doctor believed that because the surgical ward had a lot of free bed capacity on paper, it was almost daily practice that patients ready for discharge were transferred to them.

Nurses, physicians and management admitted to not being particularly positive when patients ready for discharge were being transferred to their wards. The reason for this was ascribed to a fear of the wards being filled up with patients ready for discharge. This could cause cancellation of surgeries, lead to patients not being admitted or having to be admitted to other wards. This in turn, they felt could lead to a poorer quality in the treatment. Due to a great degree of specialization in the hospital the nurses and doctors among the informants felt that patients being treated in the "wrong" hospital ward in general could lead to poorer treatment and care for the patients.

> *No, it shouldn`t become more specialized. And it`s actually in that way dangerous to be admitted to the wrong department. ... It`s not actually good for the patients to continue lying in the wrong department. ...We know too little about it* [other fields of diagnostics]. *... We should have had the good old fashioned doctor who knew everything, but that`s not the case anymore* (Doctor 2, surgical ward).

However all the informants agreed that it was both unfortunate and unworthy, when patients ready for discharge were moved around within the hospital:

...these patients are truly tossed around in the system and this is really a bad patient care actually… This is in fact old people that are not benefitted in any way by being constantly moved around and getting new rooms and new personnel surrounding them at the same time… the risk of delirium increases and of course it increases the risk of mistakes in the system considering that many new people are handling the medication and care, all the time (Leader 2).

Patient pathways

One of the projects that were intended to improve the coordination between the primary health care and the specialist health care was according to the management the developing of patient pathways. It was visualized during the interviews that the developing of patient pathways now was a focus area at the hospital in terms of the knowledge acquired by the informants about patient pathways. According to the doctors and nurses there have always been patient pathways in the hospital, but those have been unwritten and internal for each hospital unit. Now the informants knew that it implied preparing a pathway from when the patient gets ill; what is being done in the primary health care, to admission, examination and treatment at the hospital, and discharge, in addition to the follow-up care in the primary health care after discharge.

> *And in my simple world I thought that patient pathways, that was from when he was admitted to me and what happened here and till I discharged him, but it`s more than that prior, in terms of outpatient clinic, referrals from the GP* [general practitioner] *and at the same time what is dealt with afterword's too* (Nurse 1, surgical ward).

There were mixed opinions among the nurses and doctors concerning the work with patient pathways and several had different experiences in developing them. The management was exclusively positive and meant that this was something the hospital needed. Compared to the Coordination Reform, which the informants had experienced having an economical focus, the management meant that patient pathways were all about quality assurance. They were also convinced that there was a commitment among the employees to develop them.

> *But it is maturation in this, right? We see how the Coordination Reform has come all the way from the top, from Cabinet Minister, right? Then it has been floating around and to a small degree been specific. But exactly the work with the pathways, which we are talking about, now it has so much pressure on in the entire house* [hospital]. *And there is an enthusiasm in the groups that are working with this as well. So it has some*

foundation in it that makes this something which after a while will stand on its own and people will see the intention behind. And that is very promising in terms of actively using it ahead as well (Leader 2).

Discussion

First there will be a discussion about the choices made concerning design, method and the participants. There will also be a consideration in relation to transferability of the findings in this study. Then follows a discussion of the result based on the recent literature.

Methods

Choice of design and method

A qualitative design gives possibilities for a greater understanding of human qualities like experiences, thoughts, motives, attitudes and behavior (Malterud 2011). In the White Paper it was unclear what the Coordination Reform in fact would entail for the hospitals. To examine how the Coordination Reform actually had influenced the health care professionals at the hospital and what experiences they had in regards to the actual implementation, the choice of a qualitative design was natural.

Focus group interviews as a method gave opportunity to assemble people with the same profession in groups to identify similarities and differences in experiences regarding the Coordination Reform. The choice of having representatives from two different wards was essential in this respect. Focus group interviews were also a rational approach for collecting data. In comparison with individual interviews they also provided opportunities for drawing conclusions on behalf of additional representatives within the same professions to a greater extent. They were however supplemented by semi – structured individual interviews that proved to be important in terms of providing richness in information, examples and details concerning important themes that occurred during the interview process.

Individual interviews made it easier to delve into the different themes and collect in-depth descriptions and the informants shared their experiences to a greater extent. In some of the focus groups they were more guarded and some informants shared more than others, which made the role of moderator more challenging. In light of this it was the right choice to include both methods.

The participants

The sample was represented by males and females, and the professions nurse, junior doctor, senior doctor and leader. This provided variations within and between the groups. All the informants had been in the same profession and at the same ward prior to the implementation of the Coordination Reform with the exception of one. They had therefore experiences from the actual implementation process and up to the starting point for the interviews. Interviewer

and author had knowledge of all the informants beforehand by being a health care professional employed at the same clinic and this provided confidence in the interview-setting and space for openness concerning emotions, thoughts, attitudes and experiences. The compositions of the groups had similar effects. A less homogeneous mix with nurses, doctors and leaders in one group, would most probably have caused reserved and "made-up" answers due to hierarchic compositions in the hospital setting.

The beforehand knowledge may have led to a somewhat subjective selection which further could have provided uniformity in the answers. Opposition was however expressed during the interviews. It may also have influenced the answers that the author was a health care professional and had experiences in regards to the different themes that were discussed. Review of the transcriptions showed that interviewer to a great degree managed to maintain a neutral role. The interviewer had no knowledge of the informants` experiences and attitudes regarding the Coordination Reform beforehand.

Data analysis
Data was collected, transcribed and analyzed by the same person. During the process of developing the interview guide, performing the interviews and analyzing, continuous dialogs with the responsible supervisor have been conducted to secure different approaches. By using entire quotes as meaning units in the process of analyzing and at the same time using them actively in the creation of condensates, the voice of the informants have been kept, de-contextualization. In the process of making condensates the author made constant reviews over the transcriptions to make sure the authors voice was not visible, re- contextualization. This work was done thoroughly in regards to the author`s preconceptions. The author has been visible in the data selection. From extensive data themes were chosen that the author felt best illuminated aspects of the research question.

Transferability
Malterud (2011) uses the term transferability when assessing the external validity in qualitative research. Summed up the variation in this sample in terms of gender, profession and affiliation to different subfields of the same diagnostic field, give the basis for transferability to the similar professions and health care professionals within the clinic. It was several similarities in the experiences internally in the groups but also externally between groups, in addition to the organization of the clinic that creates more security in arguing that findings could be transferred to other clinics within the hospitals, taken into consideration that they are hospital wards too.

Discussion of the results

The process of implementation and possible barriers

All the nurses and the doctors among the informants experienced that information from the management concerning the Coordination Reform in general was scarce, and they felt unprepared for the specific changes in routines that occurred from January 2012. These changes were part of the new law enforcement called The Law for the municipal health- and care services, involving the municipal financing of the patients ready for discharge (Helse- og omsorgsdepartementet 2012) and changed guidelines for notification to the municipalities for the hospitals (Helse Midt-Norge 2012). Several studies show that lack of knowledge is one of the main barriers to implementation (French et.al 2012, Bayley et. al 2012, Grimshaw et. al 2004, Gurzick et. al 2010). In one of these studies they explained that one of the reasons why it became a barrier was that health care professionals did not understand the intention and the actions behind the implemented guidelines (French et.al 2012), which corresponds with what the informants described in the interviews. Lack of time for the actual reading of the guidelines was also seen as a barrier (Bayley et. al 2012). This can be seen in relation to what many of the nurses in the interviews and one of the doctors said concerning the difficulties in selecting what information to read, during a busy work- day. A review of implementing strategies show that providing information alone requires that health professionals are active consumers of information and willing to change the professional behavior following the information in terms of routine changes (Jamtvedt et.al 2006).

One study noted that research indicates that including information along with the guidelines to assist the users with the implementation of the guidelines, will further lead to a better understanding how to adapt to the guidelines, inducing change of practice and the actual use of them (Gagliardi et.al 2011). In addition the format and contents of the guidelines were important aspects for implementation. Characteristics that promoted use were: strong and supportive evidence, concise recommendations, easily accessible, trustworthy, short and concise, recommended actions are feasible and additional tools as check-lists, lists of rules for solving the issues at hand or pocket- cards. The experiences of the informants in this study may have been different if the university hospital had introduced the guidelines and the changes in relation to the Coordination Reform alongside with background information before implementing them. In this way a better understanding and implementation among the informants may have been the result. When taking the informants recommendations into

account information should to a greater extent have been made available and more practical, short and concise.

According to the informants there was a lack of training in relation to the changed guidelines concerning the 24 hour notification to the municipalities, in terms of the initial way of conveying the notification usually by phone and later the e-messaging. Several studies show that lack of training and competence is another one of the main barriers to implementation (Lauvergon et.al 2012, Bayley et.al 2012, Grimshaw et.al 2004, Spetz et.al 2012, Sandvik et. al 2011). One of them reported that nurses often expressed the need for training and staffing resources to a greater extent than other health care professionals (Bayley et. al 2012), which corresponded with the overall impression from the interviews. Intervention components to induce competence are for example workshops, written information and guiding demonstration of behavior (French et. al 2012). These are measures that the hospital management through the clinic management, could have taken into consideration. In addition, training could have been offered prior to the implementation of the notification system, at least in regards to the part were the e-messaging was introduced.

The e-messaging solution was especially by the nurses in the study experienced as cumbersome and not user-friendly. Experiences from a study examining the implementation of IT (Information Technology) –systems showed that equipment availability and – applicability were promoting factors in addition to available guiding and support to engage the users (Spetz et. al 2012, Cresswell et. al 2011). In terms of the e-messaging solution the nurses in the interviews were offered phone numbers to call for aid and support, but this was introduced after the actual implementation. One of the studies above demonstrated further that when hospital employees were not consulted in the choice of computerized systems this led to frustration, and the frustrations increased when the system implemented were experienced as not user- friendly (Cresswell et. al 2011). This can partially explain why the nurses and the physicians among the informants were frustrated and showed resistance towards the conduction of e-messaging. The other study also showed that when problems occurred early in the implementation, it had a tendency to become persistent (Spetz et. al 2012), which can explain why the informants still felt frustrations towards the e-messaging process even though the system was implemented some time ago.

Due to the changed guidelines for notifying the municipalities and an additional pressure from management to notify and register the patients correctly to not lose money, the nurses among

the informants felt that there became an increased focus on economy. When financial conditions oppose the quality of care this is seen as a barrier for implementation because of the threat towards the professionals` role and autonomy (Lauvergon et. al 2012, Martinussen et. al 2011, Treweek 2005).

In addition the rapid implementation of the 24-hour notification and later the e-messaging solution could further have induced the frustration and resistance among informants. A study from Norway reported that the rapid implementation of the Hospital Reform in 2002 led to massive resistance among the physicians in the hospitals. The success of a reform is depending on how the clinicians and administrators interpret the problems that the reform addresses and how they understand their own role (Martinussen et. al 2011).

The nurses in the study felt that the changed guidelines and the routine changes that followed the implementation of the Coordination Reform were imposed on them from top- to clinic management. A top- down approach in itself can be a barrier for implementation (De Allegri et. al 2011); in addition it becomes a second barrier because of the threat towards the health professionals` autonomy (Cresswell et. al 2011, Lauvergon et. al 2012). One of the leaders among the informants said it was impossible to make plans for preparing the implementation of the Coordination Reform, due to what the leader explained as a general lack of faith among the top management in the changes following the reform. A lack of faith is also considered a main barrier for implementation in several studies (French et. al 2012, Grimshaw et. al 2004, Lauvergon et. al 2012). A plan for action from management and their support are seen as important promoting factors (Sandvik et. al 2011). Another study demonstrated that when the management was forced into implementing a system, they had to sell a product they did not believe in (Cresswell et. al 2011). Although it examined the implementation of ICT-solutions, the finding has certain aspects of transferability to the management in this study. If you are to convince someone that you need to change, it is important to have credibility (Cresswell et. al 2011). The lack of plans, opinions about who was responsible for making plans, and the lack of faith in top management, perceived by the management in the interviews, may further imply a lack of management commitment at all levels. A strong leadership is essential to affect others within the workforce and create an environment where effective policies can be developed and implemented (World Health Organization 2010).

The "easy" versus the "complicated" patients

In an article concerning the experience with patients ready for discharge in municipalities in Mid-Norway there was a perception among the health care workers that after the Coordination Reform patients ready for discharge had fewer bed days in hospitals (Grimsmo 2013). This corresponds with the informants impression in terms of patients considered as "easy", but not when it comes to the "complicated". According to the informants the "complicated" patients residing in the largest municipalities showed increasing number of bed days. In the same article it was not stated whether there were any differences in bed days in relation to the complexity in the patient`s needs (Grimsmo 2013). However, it was pointed out that patients were discharged too early from the hospitals and compared with before their conditions were worse and their needs more complex. This in turn had induced a greater need of competence among the health care workers in the municipalities. It was also reported that the smaller municipalities had to the same extent or to a greater extent managed the realignment compared with the larger municipalities. This corresponded with the impression of the informants. It was also interesting to see that the smaller municipalities in fact had regarded receiving complex patients as a positive challenge that could lead to a better recruitment of health care professionals in the municipality (Grimsmo 2013).

The reason why there was differences in bed days between these patients, were by the informants in the interviews just perceived as a lack of competence in the bigger municipalities. Another study conducted in Norway also reported the need for elevation of competence among the municipal health care workers (Gautun et. al 2013). In the white paper "The Coordination Reform" competence was seen as a necessary prerequisite for achieving the goal of a changed municipal role towards a greater focus on early intervention and prevention (Helse- og omsorgsdepartementet 2008-2009). Similar needs of competence elevation have also been detected in the rest of the world to encounter the challenges of the growth of patients with chronic and compound disorders (World Health Organization 2010, Van Houdt et. al 2013). Some of the informants regarded the establishment of a palliative care and an emergency- unit in the municipality where the hospital is located, as an elevating measure of competence. They were of the impression that this would lead to a spread of competence within the municipality. The establishment of these kinds of units is also completely in line with the intensions in The Coordination Reform (Helse- og omsorgsdepartementet 2008-2009).

Some of the informants in the study also attributed a financial cause to why they perceived a lack of competence in the municipalities because competence costs money. Another "financial" reason why the "complicated" patients may have increased bed days compared to the "easy" patients, can be that the resources needed to manage the care for these patients in the municipalities are more expensive than the actual fee for having a patient ready for discharge still admitted. The fee was set to 4000 Norwegian Kroner per. day for the municipalities to pay until they received the patient (Helse- og omsorgsdepartementet 2012), meaning that if the municipality had to offer services costing more than this, taking over the responsibility for the patient would lead to extra cost.

One of the studies examining health care workers in the municipalities reported that 36 % of the employees interviewed felt insecure in performing tasks (Gautun et. al 2013). This corresponds with the opinion of the informants in the study. It can further explain why patients were perceived by informants as being admitted unnecessary and why the complicated patients had increased bed days, even though the informants said that training was being offered from the wards. However, the health care workers in the municipalities experienced that many discharged patients still had the need for hospital treatment and readmissions were a sign of too early a discharge (Gautun et. al 2013, Grimsmo 2013). Interestingly, statistics from the St. Olavs Hospital did not show any increases in the overall readmissions from 2011, before the Coordination Reform, and the two years after (St. Olavs Hospital 2013). In fact they showed tiny decreases. The opinions of the municipalities did not correspond with the opinions of the informants in this study either. The doctors felt strongly that their assessments of patients ready for discharge had not changed since the implementation of The Coordination Reform and that their assessments were based on sound professionalism. Some of them therefore declared in the interviews that they were baffled by the reports from media conveying that patients were discharged in a worse condition than before.

Specialization and different professional views
The aim for the specialist health care in terms of the Coordination reform was to focus to a greater extent on the specialized health care services they provided and to develop in a more specialized direction (Helse- og omsorgsdepartementet 2008-2009). In several of the interviews conducted in this study the informants expressed thoughts concerning the hospital already being too specialized.

One of the nurses in the interviews thought one of the main intentions behind the Coordination Reform was to save money by preventing hospital admissions which would further lead to hospital beds being closed down. This was in her opinion impossible because each hospital unit was too specialized. One bed less on each unit would not lead to staff reductions. A study noted that patients admitted to the hospitals that later on were registered as patients ready for discharge only accounted for 4 % of all hospital admissions (Romøren et. al 2011). Therefore the effect of the daily penalties as a result of the financial incentives following the implementation of the Coordination Reform would be weak. However, this finding was done prior to the implementation of the Coordination Reform. In a letter directed to the editor in the Norwegian journal, Tidsskrift for den Norske legeforening, Helling raised criticism towards the fact that 20 % of the hospitals` funding was been transferred to the municipalities, when the hospitals already had major deficits in the operation (Helling 2009). He meant that this would lead to a decrease in the services offered to the patients. In addition he was of the opinion that the Coordination Reform would not lead to fewer hospital admissions, because admissions were not governed by financial concerns, but rather by medical assessments. Experiences from neighboring countries showed that financial incentives led to fragmentation in the development of integrated care and increased competition between the primary- and the specialist health care (Romøren et. al 2011). This does not sound promising in terms of improving cooperation between the two organizations or the aim to specialize the hospitals further.

Another concern which was raised by the informants in terms of the hospital being too specialized was shared by the Director of coordination at St. Olavs Hospital (Helse Midt-Norge 2013). The Director said that the safety of patients could be threatened when patients in need of specialized competence did not get admitted in the appropriate unit and this happened when the capacity of the biggest clinics were overloaded, i.e. bed capacity being used to hospitalization of patients ready for discharge. This corresponds with the opinions of the informants in this study and has further implications for the aim of the Coordination Reform introduced in the White Paper as right treatment, at the right place, at the right time (Helse- og omsorgsdepartementet 2008-2009). Bed capacity being occupied by patients ready for discharge also implies that the health care professionals do not get to use their specialized competence, i.e. the aim for the hospital to focus more on their specialized expertise. It is interesting however to see that one study noted that subspecialized expertise, e.g. the hospitals today, although having offered clinical improvements for a lot of people with uncommon

disorders, critical diseases and conditions that required special techniques, research did not support that this development should continue (Barondness 2000). Further it conveyed that subspecialized care was much more expensive than general care i.e. primary care, and had a tendency to involve greater use of technology and result in a pattern of referral to other subspecialties when issues beyond the referring physician`s competence was present. Both were seen as cost drivers.

A third concern in terms of the hospital being too specialized was introduced by the nurses among the informants in relation to the exchanging of information between the hospital and the municipalities when patients were being transferred. Several studies conducted in Norway showed that health care workers in the municipalities were of the opinion that information from the hospitals when patients were discharged was insufficient (Grimsmo 2013, Røsstad et. al 2013, Gautun et. al 2013, Paulsen et. al 2013). According to the nurses among the informants in this study, the content of their information was based on what had happened to the patients at the hospital in terms of symptoms, diagnostic, treatment and care. For the informants this kind of information was essential and involved the kind of information they themselves would have wanted to receive. Health care workers in the municipalities missed information concerning the patient`s level of functioning, his social ability and mental capacity to further plan his arrival at home (Røsstad et. al 2013). Due to different medical perspectives and different opinions of what the aim of the service is, this has caused challenges in the communication regarding patients (Helse- og omsorgsdepartementet 2008-2009, Røsstad et. al 2013). According to the employees in the municipalities the health care professionals at the hospital were too concerned by the patient`s diagnosis and the treatment (Røsstad et al 2013).

The nurses among the informants in this study felt that one of the reasons why the coordination with the municipality in which the hospital is located had become worse, was among other, their different perspectives concerning the patient`s need for municipal care. Sometimes they had felt overruled by the municipalities. In light of this it is interesting that nurses in the municipalities felt the opposite, i.e. that the hospitals tried to overrule them (Paulsen et. al 2013). Especially this is interesting when it is being formulated in regulations that the municipalities shall have the final decision in regards to what municipal care the patients are to receive (Helse Midt-Norge – Samhandling – Samhandlingsavtaler Helse Midt-Norge 2012).

According to the nurses in the interviews the disagreements were caused by the scoring system in the 24-hour notification. A contributing factor was the lack of training in the overall 24-hour notification system, but they had no training in the scoring system at all. The scoring system is part of IPLOS-system created for the employees in the municipalities by the Directory of Health in 2006 (Westeren et. al 2012). Hospital employees are not used to this way of assessing patients and they do not know what the different scores imply. The development of ICT-systems and patient pathways will be important for improving the coordination (World Health Organization 2010, Røsstad et. al 2013, Van Houdt et. al 2013). A study from the USA described that the implementation of health reform in general, patient pathways and cooperation between treatment levels are essential (Naylor et. al 2011)

ICT-solutions and Patient pathways to improve coordination
ICT-solutions like the e-messaging were not experienced by the informants as a measure that improved the communication with the municipality in which the hospital is located. Better coordination between the primary health care and the specialist health care was one of the main goals of The Coordination Reform (Helse- og omsorgsdepartementet 2008-2009). Developing ICT-solution was one of the strategic measures listed in the White Paper and the objective was among others that all communication between the different care providers and between the patient and the care provider should be electronic. According to the nurses especially, but also the doctors in this study, they felt that the e-messaging solution was not effective when discussing patients with complicated and compound needs. The nurses felt that instead of sending messages back and forth it was safer and more effective to notify the municipalities by phone instead. ICT-systems are to a greater extent used to improve sharing of information across groups of health care providers in hope of getting a more effective and safe care (Cresswell et. al 2011). This does not correspond with the opinion of the nurses in this study regarding the e-messaging solution, although they saw it as positive that updated medication charts followed the solution. In several of the municipalities in Mid-Norway the need for electronic communication was expressed, because of the increased use of telephone or telefax (Grimsmo 2013). The nurses in the interviews told that primary care nurses from the municipality in which the hospital is located, reported being grateful for receiving information about the patient prior to discharge. The nurses among the informants missed getting information like that in return, prior to admission.

Another concern that was heavily expressed by one of the leaders among the informants was the lack of common platform within ICT-systems between the primary- and specialist health

care to coordinate the care for the patients. This concern has been expressed abroad as well (World Health Organization 2010, Van Durme et. al 2014). Clinical information systems lack interoperability, which further affects the information flow (Van Durme et. al 2014). They saw the need for development of electronic medical records within all settings and a national ICT-platform to ensure shared information. Every organization had their own system but there lacked compatibility between the software-systems. The same problems were detected by the leader in the interviews. Development within ICT-solutions in Norway may be of importance if the goal of the Coordination Reform of a better coordination between the primary- and specialist health care are to be reached.

The development of patient care pathways was another one of the measures introduced in the White paper the Coordination Reform to improve coordination between the primary health care and the specialist health care (Helse- og omsorgsdepartmentet 2008-2009). The main goal with developing patient care pathways was however to create coordinated services for patients with chronic and compound disorders, that went across settings, organizations and health care professionals (Helse- og omsorgsdepartementet 2008-2009, Van Houdt et. al 2013). Similar needs for this group of patients have been identified in countries all over the world, but also the additional need to create interventions that reduces these disorders and being cost effective solutions at the same time (World Health Organization 2010). According to one study performed in Belgium, the lack of integrated care was one of the biggest flaws with the current health system (Van Durme et. al 2014). The definitions of roles and functions for the health care professionals involved in the care process were unclear. To improve coordination, defining each health care professional role was important (Lauvergon et. al 2012).

In Norway, as well as Belgium, the work with developing patient pathways has been managed by the hospitals (Van Houdt et. al 2013). However there was now a growing interest to expand the pathways to including the primary health care as well. Similar intensions for the university hospital and the municipalities were also expressed by the management in the interviews. Experiences from Belgium in performing this task showed that cooperation between the primary health care and the specialist health care was challenging (Van Houdt et. al 2013). Health care professionals in the two organizations lacked understanding for each other structure and organizing, including roles, tasks, competence, procedures and the organizations. Considering the different organizing and perceptions of what the aim for the health care services are, between the primary-and specialist health care in Norway (Helse- og

omsorgsdepartementet 2008-2009), there is likely that the same experiences will occur here in the development of patient pathways. A study examining the cooperation between hospital and the municipalities in relation to developing integrated patient pathways conducted in Norway, confirmed exactly these challenges (Røsstad et. al 2013).

Although the management in the interviews told that developing patient pathways was now a target area at the university hospital, and including primary health care was important in that respect, little was said about how this cooperation should be performed in practice. And nothing was said in regards to representatives from the primary health care actually being involved in the development process. Feeling a sense of ownership to the patient pathways was found to be an important motivating factor for developing and implementing the pathways (Van Houdt et. al 2013). This may entail that if the goal of the Coordination Reform is to be fulfilled, representatives from both the hospital and the municipalities should be included and responsible for developing these pathways.

According to the management in the interviews more resources had been put into informing the employees what the intentions behind developing these pathways were and their utility value. Measures had been targeted towards including the employees in the process of development and according to the management in the interviews all levels of management at the hospital had faith that patient pathways were something the hospital and the health system needed. A promoting factor experienced by the informants was the intention of improving the quality of the services provided, which is in accordance with health care professional` desire to offer high quality in the services they provide (Sandvik et. al 2011, Gurzick et. al 2010, Grimshaw et. al 2004). By directing measures towards known barriers through providing thorough information, including health care professionals and changes in organization by management commitment, it may result in a better implementation compared with what the informants felt about the initial changes following the Coordination Reform. However, concerns were raised from the doctors and nurses in the interviews whether the work with developing these pathways would imply additional work without time being set aside. This is something that all levels of management at the hospital should take into consideration if they want motivated health care professionals involved in the development and implementation of the patient pathways.

Experiences from the study conducted in Norway should also be taken into consideration (Røsstad et. al 2013). The primary health care and the specialist health care did not manage to

integrate a disease- based patient pathway, but agreed to make a common care- pathway that included most diagnosis and dealt with the transferal of patients between the two care-providers in terms of information flow and municipal follow-up. Patient pathways based on different diseases and diagnoses were kept within the hospital as before. Other studies have seen great results in having a neutral organization following the development and implementation of patient pathways (Van Houdt et. al 2013) or having specially trained nurses complement the same function (Gurzick et. al 2010, Bauer 2010).

Conclusion

Several possible barriers for implementation were detected based on what the informants in this study experienced in terms of the implementation of the Coordination Reform. These were; lack of knowledge and training, lack of time, lack of equipment applicability in the ICT-solutions, the professional role and autonomy, a top-down approach, lack of faith and a lack of leadership commitment. Based on the informants` opinions, information could have been made available to a greater extent and the hospital could have introduced the changes following the Coordination Reform along with background information, to have ensured a better understanding and implementation among the employees. In addition it seems like a lot of frustration may have been prevented among especially the nurses in the interviews if appropriate training together with information in terms of the changed guidelines, i.e. 24-hour notification, had been offered.

Health professionals in the interviews had noticed that most of the dischargeable patients had shorter bed days after the implementation of the Coordination Reform which corresponded with the impression in the municipalities located in Mid Norway. However, this experience only included the patients considered as "easy". The impression among informants was that the "complicated" patients stayed longer. This impression was often expressed in regards to the larger municipalities. The reason behind this was perceived by the informants to be related to a lack of competence in the municipalities, although financial matters may have played an important part.

Transferal of patients ready for discharge within the hospital because of lack of bed capacity in certain units, has in the worst cases according to the informants led to consequences in the daily operation of the clinics, in terms of cancellations in surgeries, but also patients being admitted in the wrong units i.e. not receiving the specialized competence that was initially

intended. Based on this several of the informants meant that the hospital should not be any more specialized than it already was.

Health care professionals in the interviews experienced that the coordination with some of the municipalities had become worse after the implementation of the Coordination Reform. An increased focus on economy and an increased bureaucracy in terms of the handling of the dischargeable patients had contributed to this experience. Different professional perspectives and a lack of ICT-solutions were however believed to be the biggest challenges in the coordination, and development of ICT-solutions and patient pathways was important measures in that respect. Especially these measures will be essential for the exchanging of information between the hospitals and the municipalities and the quality in the information. Compared to the implementation of the Coordination Reform the management was of the impression that developing patient pathways had a management commitment that would make the implementation easier and better.

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