Coordination of patients between specialist- and primary care

An explorative study of hospitals’ invoicing practices in the wake of introduction of municipal co-financing

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Abstract

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Background. As a response to overarching challenges of cost containment, prevention of disease, demographic changes and the patient´s need for coordinated health care services, The Coordination reform, Report No. 47 (2008-2009) was implemented in 2012. The reform introduced strong economic incentives, legal means and organizational instruments in order to improve coordination between two levels of care. The municipalities were made responsible for the patients ready for discharge and a payment regulation were introduced. The responsibility to bill the municipalities on proper grounds rests with the individual hospitals. Statistics show that they do not claim economic reimbursement to cover for all the services given the municipalities

The aim for the study was to explain invoice issues by structural and organizational dimensions in the discharge process. How the coordination model and the instruments introduced by the Coordination reform are can explain invoice issues are also discussed.

Method. This qualitative study is based primarily on seven semi-structured interviews and document analysis. Respondents from hospital and municipalities have been interviewed.

Conclusions This study has demonstrated that the overall economic implication of the payment regulation in the hospital is insignificant. However, the economic incentive keeps the attention high at both specialist and primary level of care. Both levels spend relatively much time and effort on the administration and control of these funds. Successful planning of patient discharge is a prerequisite in order to invoice the municipalities without errors. However, the instruments introduced by the Coordination reform serve as mechanisms in an asymmetric relation between specialist and primary care and creates challenges for a successful transfer of patients between the two levels of care.
Acknowledgements

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1 Introduction

A successful patient discharge is a critical component in the shortened hospitalization for the patients. In order to achieve *proper treatment - at the right place and right time* the demand for mechanisms to improve the challenging coordination between specialist and primary care has been the subject for several studies.

Planning for care after the acute care experience requires the identification and evaluation of system, patients and caregiver issues and implementation of strategies relevant to successful discharge. In 2012 the Coordination reform was implemented to improve coordination between the two levels of care in order to make the discharge process more effective.

A regulation on municipal co-financing of hospital care and municipal payment for delayed discharge of patients was implemented (2012) as part of the legislative and economic instruments in the reform. The regulation describes the requirements for defining a patient ready for discharge, and the duties and tasks set for both hospital and municipality. Municipalities was handed the financial responsibility for ready for discharge hospital patients from the first day. The actual settlement for patients ready for discharge is decentralized. It means that the responsibility to bill the municipalities on proper grounds rests with the individual hospitals. In other words, presumably the hospitals have a great incentive to effectuate these invoices – paradoxically however the statistics show that they do not claim economic reimbursement to cover for the services given the municipalities – the question is why?
2 Background

2.1.1 The Norwegian health care system

The principle of equal access for all inhabitants is the longstanding, overarching goal for provision of health care services in Norway (1). Norwegian health care is organized at three main levels politically, administratively and financially: the national level, the regions and the municipality. The system is based on a decentralized national health services (NHS) model. The funding is raised by taxation and the main providers of health care are public (1).

The national level determines national health policy, prepares and oversees legislation and decides on the funds within the sector. The responsibility for specialist care lies with the state, since major hospital reform in 2002, and is administrated by four Regional Health Authorities (RHAs). The health care enterprises are regulated by the Secondary Health Care Act. The hospitals provide outpatient specialist care in their outpatient departments. Further inpatient specialized care are mainly provided by hospital trusts owned by the RHAs, as well as some contracted private facilities. Somatic specialist care is financed partly (60%) through block grants from the state (prospective payment schemes), and partly through activity-based financing from the central government to the RHAs (40%). The activity-based component is based on diagnosis-related groups (DRGs). Other types of specialist care are financed mainly through block grants (1).

Primary health care and long term care are organized and financed by the municipalities. The Health and Care Services Act decides the tasks for the municipalities. These include rehabilitation, physiotherapy and nursing and after-hours emergency services. The municipalities are the lowest level of public administration and local democracy (2). The central authorities have no direct command or control line to the municipal level (Johansen 2006, (3)). The primary care is hereby organized different and with great deal of freedom within the municipality. The funding system for municipalities is based on block grants. Primary care is financed from municipal taxes, the block grants and earmarked grants for special projects. Also, fee-for-service payments and reimbursement of user fees are a major source of financing (1).
2.1.2 The policy process and choice of instruments

From challenge to action

To understand how challenges are made into policy this section will explain the stages from when the challenge is identified and until the policy is implemented in different contexts. When the challenges are identified and the goal is set it is up to the government to decide what it intends to do or not to do. In a simply approach to policy and policy making policy can be defined as a statement by government on the solution to the challenge. It can be a law, regulation, ruling, decision, or order. It can also be a combination of these (4). The policy process is traditionally presented as a “stages model” (4). The process is shown in Figure 1. Once an issue or challenge moves up on the agenda it moves to the development of alternative responses to public problems. The next stage is alternative selection where the choice of instruments to address the problem is done. The next stage is enactment. This means that an act is passed, a regulation is issued, or some other formal decision is reached to take a particular action to solve a problem. After the decision is reached the policy is implemented. However this process is complex and in order to operationalize defined goals into a policy several considerations should be made. This model has been criticized for its simple and linear presentation of the process. Several scholars have argued that the process should be considered as a system rather than presenting the policy making as a step by step process.

Figure 2.1 The stages Model of the Policy Process (4)

Implementation and instruments

Design and implementation are very closely related because the choices made in the design of a policy will profoundly influence the way the policy is implemented. Further, this will
influence the outcomes of these policies. Policy design is often based on experience with similar policies that have already been implemented (4). Outcome here refers to the “substantive results of the implementation of a policy. Outcomes can be intended or unintended, positive or negative. This differs from outputs, which are laws, regulations, rules, and the like; or the effort that government expends to address problems”.

The choice of instruments is closely related to the theory about what causes a problem and how particular responses would alleviate the problem. Understanding of the causal theory that underlies the policy to be implemented is important in order to choose proper instruments. Instruments in a policy can be defined as “elements in policy design that cause agents or targets to do something they would not do otherwise or with the intention of modifying behavior to solve public problems or attain policy goals” (4).

Several scholars have sought typologies for policy instruments. Howlett and Ramesh in Birkland (4) provide two broad categories of policy instruments. They call it economic models and political models. Economic models of policy instruments focus on individual freedom, initiative and choice and tend to value non coercive instruments over those that are more coercive. The political model argues for an involvement from politics not only in the understanding of the problem but also in how we choose to solve it. Within this model the instrument is not only a technical matter, but partially a function of social pressure to favor one instrument over another. The political model will not be discussed further for this matter.

Several scholars raise critique against both this models. Interesting however is the expressed potential problem with the economic way of thinking of instruments. It is argued that economics often makes too many assumptions about what is possible in policy making on two levels. It is assumed from the economic perspective that one really know what the problem is, and that to have an agreement to do something is often easier to achieve than an agreement on what precisely has to be done. The second assumption from the economic perspective is that one has reasonably reliable information on how the instruments work (4).
2.1.3 Meeting challenges with reforms

The health care sector in Norway is continuously challenged as a result of technical development, increase of complex demand for treatment and demographic changes in the population. The response to overarching challenges of cost containment, prevention of disease, demographic changes and the patient’s need for coordinated health care services, The Coordination reform, Report No. 47 (2008-2009) was implemented in 2012. The report represents a shift away from the operational level and argues for the need for administrative and organizational changes. The key features for the reform were well known strategies put forward in many health systems: 1) more patients should receive treatment in primary care instead of be referred to specialist care and 2) discharge of patients from acute hospitals should take place earlier (2).

The reform introduced strong economic incentives, legal means and organizational instruments in order to answer the overall social-economic challenges and enhance patients need for integrated care. The municipalities were made responsible for the patients ready for hospital discharge and for 20 % of the activity-based component in the funding system for acute care. This regulation was removed in 2015 as a result of a governmental shift. The legislation was revised and in addition two new acts were adopted. This was the Health and Care Service Act and Public Health Care Act. As an organizational instrument agreements for coordination between the two levels of care were made mandatory.

The organization of primary care and specialist care at two different administrative levels demands for coordination and collaboration between institutions and health care personnel at different levels and with different competence. For this purpose coordination is defined as “mechanisms to integrate activities between health care organizations to facilitate appropriate service delivery” (2).

2.1.4 The instruments in the Coordination reform

The Coordination reform introduces a mix of instruments in order to achieve the overarching objectives in the reform. According to the approach sited in Birkland (Levine, Peters, Thompson), the supposed attributes from regulations as a policy instrument are certainty, visibility and accountability. This means that on expects certainty of the administrative and
compliance of targets. The expected response is also accountability from the implementers of the regulations and that the program is well-known. The sanctions are characterized by certainty and timeliness. The expected response from the sanctions is that when the instrument is implemented it will provide a certainty about the process and that the instrument works quickly (4).

The agreements

With the reform a binding system of agreements where introduced to regulate the distribution of tasks and cooperation between primary care and specialist care. The agreements constitute a model for coordination between the two levels of care, and were made mandatory by the Health and Care Service Act. The act was implemented in 2012, and sets out a minimum for the contents in the agreements. The negotiations of the agreements between the regional health enterprises and the municipalities took place during 2012 and resulted in one main agreement and several service agreements for each hospital and the municipalities in their region. The aim for this instrument is to improve the equity between specialist and primary care. Equity is considered an important ideal to develop successful collaboration. This is especially important in a system for parties regulated by different legislatives and financing systems (5).

The economic instrument

The economic incentive in the reform was in form of a regulation. The government introduced the payment regulation so called Betalingsforskriften. The regulation was implemented from 1th January 2012 and introduced co-payment for the municipalities for patients in somatic care and the municipalities were made responsible for the patients from day one after the patient were announced ready for discharge. The regulation describes the responsibilities for the hospital and for the municipalities for patients ready for discharge. It also sets the criteria for defining a patient ready for discharge.
2.1.5 Shift in focus for reforms- institutional change

The Coordination reform was introduced in a setting with already many existing reforms and demands from different directions. The focus of health care reforms has seen shifts over the past four decades. From focusing on equality and increasing geographical access to health care services in the 1970s to a shift and aiming at achieving cost containment and decentralizing health care services. At the beginning of the 21 century, changing the governing structures was important to make changes in the delivery and organization of health care and to policies intended to empower patients and users. The latest reforms have put effort in improving coordination between health care providers. There has also been increased attention towards quality of care and patient issues (1).

As a result of implementation of new reforms and this shifting focus, the institutions, and then especially the hospitals are continuously exposed for inconsistent demands and goals. One example could be the demand for large-scale production together with equal distribution of health care services and patient oriented health care (3).

At a general level the aim for health system governance reforms is to influence the performance of the health system by reorganizing steering, management and organizational features. The objectives relate to organizational accountability, patient responsiveness, high quality services, cost-efficiency and universal and fast access for everyone. However, according to Kjekshus, the objectives of a reform are unlikely to be fulfilled unless the hospital responds to the new governance structure by reorganizing how they work (3).

How institutional management is expected to respond to changes in governance structure can be explained by examining the relationship between governance structures, organizational structures and hospital performance (3). However, explaining institutional effect of various governance reforms based only on this model is not preferable. The analytical model’s purpose for this matter is simply to explain how there is a relation between structural variables and hospital performance i.e accountability, patient responsiveness, quality, efficiency and institutional culture.
2.1.6 Hypotheses for institutional response to mechanisms

Several scholars have argued that although the health care institutions are changing, the changes are only superficial and have no effect on the core activities (3). The clinics are unaffected and proceeds with “business as usual”. The health care sector and the different actors providing health care services are continuously exposed for inconsistent demands as a result of changes in policy and implementation of new governance reforms. One example is the demand for large-scale production together with equal distribution of health care services and patient oriented health care (3).

Within a functionalistic perspective organizational response to change in instruments for financing is expected to be change in terms of patient logistics, changes in accounting and budget routines and changes in management competencies with the aim of increasing the productivity of the hospital (3). The central set of issues is concerned around the effectiveness of the instruments. Research into the implementation of policies is largely devoted to analyzing the relevance of instruments and the effect they create (6).

This approach is contrasted by the contribution from Lascoumes and Le Gales (2007). They argue that public policy instrumentation and its choice of tools are generally treated either as a kind of evidence, as a purely superficial dimension or as if the questions it raises are secondary issues, merely part of a rationality of methods without any autonomous meaning (6). Their point of view provides a “situating” where the effects that instruments generate can be viewed. This is done by complementary angles: by envisaging first the effects generated by the instruments in relative autonomy, then the political effects of instruments and the power relation that they organize. Further, they argue that instrumentation is a significant avenue for reflection, primarily because it produces its own effects (6).

2.1.7 Characteristics of the discharge process

The process of a patient discharge from hospital starts when the team at the hospital decides that hospital-based medical treatment is no longer necessary for a patient (7). If the patient still needs services from the primary care, often the hospital nurse and the municipal nurse collaborate to ensure that the transfer to municipal care is properly planned. The doctor decides when the patient is ready for discharge, and the nurse register the patient as
dischargeable and message is sent to the ordering office. If the patient is discharged within 24 hour after the messages is sent to the municipality the fee for delayed discharge is not activated. If not, days for patients ready for discharge are generated. The municipalities are organized in different ways according to the coordination of patients. The larger municipalities have often organized the dialog and coordination with the hospital in ordering-offices. The smaller municipalities have this function typically at the nursing home in combination with other roles.

The discharge process is collaboration between the hospital nurses and the ordering office where the main goal is to provide the patient with proper care. Differences in organizational culture, conflicting professional attitudes and lack of economic incentives are key factors for quality in collaboration within an organizational situation (7).

Paulsen et. Al describes the discharge process as a collaborative chain. This means that the work is organized into sequential flow of tasks and the actors involved relates to each other asymmetrically. When the responsibility for the patient is transferred from the hospital to the primary care it represent an ending point for the hospital nurse and a starting point for the nurse at the ordering- office. This chain of tasks, roles and responsibility is complex and has different characteristics from unit to unit.

2.2 Literature review

Several studies have analyzed effects based on register data, sample surveys and case- studies in the early stage of the Coordination reform. Most of them have studied effects of the new financial scheme for patients ready for discharge. This is often done by looking at effects on readmissions and number of bed days for patients ready for discharge. Only a few studies have been conducted to investigate health care personnel´s experiences with the reform. Common features for these studies are that they are based on a modest data material and cannot be used to generalize or draw valid conclusions about experiences.

Rambøll (8) studied effects of the municipal financial responsibility for patients ready for discharge and found an increase in number of patients ready for discharge in the period from 2011 to 2012. They also found that the average number of days in hospital for a patient ready
to be discharged was reduced with 8.3 days per 1000 inhabitants, and the decrease was equal
transversely for all municipalities. The analyses were based on register-data from Norwegian
Patient register. However, Rambøll emphasizes the importance of caution with interpretation
of these numbers from NPR. The practice for registration of patients in hospitals was not
standardized. The trend is confirmed by Hagen et. al 2013 which also found a decrease with
about 60% for days in hospital for patients ready for discharge. This is a decrease from 21.5
days per 1000 inhabitant in 2011 to 12, 2 days in 2012 (9).

Rambøll also conducted a survey amongst municipalities and health enterprises, and case
studies amongst 40 municipalities and hospitals. They found that the hospitals think they
define a patient ready for discharge in the same way as before. The municipalities think there
has been a change – the patients are sicker. The municipalities think the coordination of
patients ready for discharge is according to hospital premises. The latter is supported by
evaluations of the Coordination Reform done for the Norwegian Research Council (5). They
found that in most municipalities patients arrived earlier than before and were in a worse
condition when they were discharged. Many municipalities had prioritized the patients
reported from the hospital as ready to be discharged by increasing the capacity or rearranging
beds in local institutions. Other patients living at home with corresponding needs were
overlooked to a greater extent. More administrative work was reported, and some patients
experienced less continuity. Increase in resources used to gather proper information of the
patients for the municipalities were also reported. The report was based on qualitative field
data collected by medicine students working in the municipalities.

2.2.1 Statistics and output

The Coordination reform is evaluated from activities in the whole health care sector
concerning the patient flow and interaction between all the actors in the sector. The health
enterprises have a duty to report their activities to the Norwegian Patient Register, including
all relevant dates concerning patients ready for discharge. Same dates as the basis for the
invoicing of patients ready for discharge should be reported to the Norwegian Patient Register
(NPR). Norwegian Directorate for Health publishes statistics annually to present numbers and
evaluations for coordination of patients.
In 2014 the Norwegian Directorate of health published statistics that demonstrate that total days for patients ready for discharge declined significantly (60% ) in all regions and nearly all Norwegian municipalities after the introduction of the Coordination reform in 2012. The decline continued until 2013, but then increased from 11 to 15 bed –days per 1000 inhabitants in 2013-2014. One possible explanation suggested was that part of the increase was due to a redefinition of the date used when the patient is defined ready for discharge more than one time during the stay in hospital. Still, when corrected for this, the numbers show an increase from 2013-2014 with 24%. Further, the report has compared the bed days for the regional health enterprises with their income in the period, and a similar pattern was found. However they found a gap between the numbers of bed days for discharge patients compared to the income in the period of time for all the regional health enterprises Figure 2.2 (10).

Figure 2.2 Number of days and income
3 Materials and methods

My aim for this study was to explore the process of coordination between specialist and primary care for patients ready for discharge. I wanted to find explanatory factors to understand why the hospitals could not manage to invoice for the days patients stayed in hospital after they were defined ready for discharge. I started with defining broad research questions as I wanted to comprehensively identify and explore the hospitals’ invoicing practices according to municipal co-financing for discharge patients.

Research questions

How can invoice issues be explained by structural and organizational dimensions in the discharge process?

How can the coordination model and the instruments introduced by the Coordination reform explain the invoice issues?

3.1.1 Data collection

Interviews

To explore the subject of hospital invoicing and the municipal responsibility for patients ready for discharge it was appropriate to choose qualitative interviews as method (11). My assumptions in the beginning of the study were that the gap between invoice and income found by NPR could be explained by technical design and misuse of systems. I wanted to find out how much these factors could explain and why.

I wanted to find out as much as possible on hospital routines and characteristics of the discharge process. I also chose to explore attitudes towards the payment regulation and the coordination reform in general in the specialist care. Further I wanted to examine how the municipalities were organized to handle the payment regulation and how the practices according to the agreements were in the municipalities. I also wanted to find attitudes towards the municipal responsibility for patients ready for discharge.
In order to find out about my assumptions but also open up for relevant themes from the respondents I constructed a semi-structured interview guide (11). The guide was based on my broad themes in order to explore and enable the respondent to talk freely and express the things they found most relevant to explain invoice issues. For each theme I had questions to ask on details if the interview went in the wrong direction according to my objectives.

**Agreements**

To achieve the study objectives examine the issues from different perspectives I examined government and semi-government publications, regulations and agreements for coordination between the hospital and the municipalities (12). I especially found that the agreements between the hospital and the municipalities were an important source to examine as the agreements were made mandatory as a part of the coordination model in the Coordination reform.

**Evaluations and reports**

Earlier research had already found effects from the payment regulation on readmissions and days for patients ready for discharge. To explain the objectives set for my study I wanted to perform an examination of separate and independent sources (12). However many of the evaluations I found were based on numbers from NPR, and represented the same findings. I used the Report No. 47 (2008-2009) The Coordination Reform to learn about the intentions for the reform and the challenges the reform aimed at solving. The report was an important source to understand the background and knowledge that served as a basis for the legislative and economic incentives in the reform.

Secondary data were collected from “Samhandlingsstatistikk 2013-2014” publicized by Norwegian Directorate of Health in 2015 (13). Their report is based on data from Norwegian Patient Register (NPR) and Statistics Norway (SSB). In order to understand the numbers, I contacted NPR and asked them to explain the analysis of the number for patients ready for discharge.

I also collected number of days and total income per month for patients ready for discharge from the two hospitals and the municipalities in the two cases. This was provided to me by the two hospital informants.
3.1.2 Sampling

**Hospitals**

In order to examine my objectives by qualitative interviews within the limited time available it was necessarily to choose informants from units with a broad experience and knowledge on the subject. My assumption was that large, centralized hospitals with many autonomous municipalities to cooperate with had broad experience. This would give me a broad understanding for coordination of patients between the two levels of care and through semi-structured interviews I would be able to cover the scope necessarily to comprehensively explore my objectives. In the contrast I wanted to interview a respondent from a small, regional hospital to compare their experiences with experiences from the large hospital. In order to answer my objectives comprehensively I wanted not only to have many and broad experience, but I wanted to examine if different experience could explain and answer my objectives. My choice was to perform interviews with leader of the coordination department from the two hospitals. This choice was based on my assumption that the leader had the broadest experience and knowledge about the coordination of patients. Given the restrictions according to time I wanted to interview a respondent from the two hospitals that could provide both experiences from the departments at the hospital and experiences from the municipal collaboration.

**Municipalities**

I wanted to interview informants from municipalities within the region of the two hospitals. Within the region for the large, centralized hospital I wanted interviews with two medium large municipalities within the same geographical distance to the hospital to see if the experiences between the two were different. For the regional hospital I wanted to find out about the experiences from one small and one large municipality with different geographical distance to the hospital.

My choice of municipal informants was done based on three different municipal roles and institutions for patients ready for discharge. This was the ordering office, the nursing homes and the home care service (7). The division of these roles is not necessarily the same from one municipality to another, but the responsibilities and roles in the coordination of patients are the same. The patient coordinator receives the information about the patient and decides on
the proper care for the patient after discharge. When a decision is made either a homebased health care manager or a manager in the local nursing home coordinates the discharge process with the hospital. My assumption was that the leader of the ordering office could provide most experiences and information in order to answer my objectives.

### 3.1.3 Respondents

The respondent from hospital 1 was chosen by calling the coordination department and asks for the relevant person to interview. From the interview with the assistant leader of the coordination department I got names to contact in municipalities within the hospital region. I did the same with hospital 2, but for this region I contacted the municipalities directly by phoning and asked for a relevant person. For the regional municipalities it was difficult to find respondents. When I called and presented my subject especially the small municipalities had difficulties with directing me to a relevant person. I therefore had to call several times and send e-mail to come in contact with the respondents. The patient coordinator role were not so definitive in several of the small municipalities. I also experienced that two of the municipalities I contacted rejected to participate and did not want to be interviewed. The two did not give reasons for the rejection.

Table 1 shows the respondents from the two hospitals and the four municipalities.

In addition to the six respondents from the two cases I interviewed a Ph.D. Candidate working for the BEPPLO-project. This interview was not recorded, nor transcribed. The interview was conducted to verify some of my data considering PLO-messages and the ICT-systems in hospital 1.

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<thead>
<tr>
<th>RESPONDENT</th>
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<td>Case 1</td>
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<tr>
<td>R1 hos</td>
<td>Hospital 1</td>
<td>Assistant leader Coordination Department</td>
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<tr>
<td>R3 muni</td>
<td>Municipality A</td>
<td>Leader of Ordering Office</td>
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<tr>
<td>R4 muni</td>
<td>Municipality B</td>
<td>Team leader, Health and</td>
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Table 3.1 Respondents
<table>
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<tr>
<th>Case 2</th>
<th>R2 hos</th>
<th>Hospital 2</th>
<th>Leader of Coordination Department</th>
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<tbody>
<tr>
<td>R5 muni</td>
<td>Municipality C</td>
<td>Team leader, Health and Care services</td>
<td></td>
</tr>
<tr>
<td>R6 muni</td>
<td>Municipality D</td>
<td>Nurse/Office worker, Ordering Office</td>
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<tr>
<td>R7 Ph.D.</td>
<td>Ph.D. Candidate, BEPPLO project</td>
<td>researcher</td>
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### 3.1.4 Ethics

The respondents were informed about the study and the use of the data before the interview started. All the informants consented to participate by signing a form which was returned to me before the interview. Using a semi-structured interview guide six people was interviewed from August to October 2015. All interviews were audio recorded (with permission from the respondents) and transcribed verbatim. After the report is written the recordings will be deleted. The interviews are transcribed on my personal computer and stored using the codes for the different informant. These transcriptions will be deleted after the report is written. The lengths of the interviews were from 30-60 minutes.

The hospitals and the municipalities are coded and made anonymous in the report. For this reason the agreements I used to analyze the coordination between hospital and municipality are not part of the references following the report.

The study was approved by the Data Protection Official for Research of the Hospital (ref. no 14-022) as a part of the project Betingelser for endring av praksis ved innføring av elektroniske pleie- og omsorgsmeldinger i helsesektoren (BEPPLO) at Norwegian Business School.
3.1.5 Data analysis

Through my interviews with informants from 2 hospitals and 4 municipalities and analyses of agreements for coordination between hospital and municipality I identified main themes relevant to explain my objectives. I started my study with assumptions on explanatory factors for the objectives and when patterns of explanations became visible in the data material I compared the patterns with my previous assumptions. The assumptions were a good starting point for division of data into relevant themes in order to describe the pattern. My next step was to describe the data and make it into a narrative form. I was then able to compare my findings and validate the explanations using findings from other studies and research reports (12).

3.1.6 Verification

I asked the two hospital respondents to read through part of what I wrote about reasons for errors and wrong registrations. I also interviewed a Ph.D. Candidate from the BEPPLO-project. The BEPPLO-project is an innovation project at Akershus University Hospital, financed by the Norwegian Research Council. The project is cooperation with Akershus University Hospital, Norwegian Business School, The University of Oslo, Department of Informatics (UiO), Skedsmo municipality and Oslo municipality.

3.1.7 Limitations and strengths

The study is based on a qualitative method and is not suited to perform aggregated analyzed of the outcome from the mechanisms implemented by the reform. The results presented in this report represent the findings from in-depth interviews with informants from two hospitals and four municipalities. The informants are not representatives for their units; they merely represent an insight in experiences with the objectives at a micro level.

The strength by this method is the data collection from different sources. The findings in this study are a result from multiple measures of my objectives (12). The different sources provide evidence from different perspectives and with different rationale.
4 Results

General aspects

Through my interviews with hospital respondents I found that the problems with proper invoicing can be explained by errors in the registration of patients in the electronic patient record at the hospital (14). The payment regulation makes it mandatory for the hospitals to report numbers for patients ready for discharge to NPR. The report that hospitals send to NPR is generated from the system and the basis for the numbers are the date for patient ready for discharge. Due to errors in the registration, different practice for registration (15) and poor quality in general the number of days sent to the NPR is not necessarily days where the municipality is financial responsible. Figure 1 shows the patient trajectory and the PLO messages sent between hospital and municipality when planning for the discharge and care to provide the patient in primary care after discharge. The paragraphs refer to the payment regulation.

Figure 3.1 Electronic messages from admittance to discharge
The errors in registration can be explained by characteristics of the patient trajectory. Each patient trajectory is different and different variables in the patient treatment affect the registration. Change in a patient’s status can be necessarily due to a worsening condition, there is a need to run more tests or the hospital does not have all mandatory documentation ready in time to discharge the patient that same day. In some of these cases the routines for registration fail and the system generates days for patients ready for discharge, which in turn is reported to NPR. The same numbers as in the report generates the basis for the invoice sent to the municipalities. The result is therefore that the municipalities are invoiced for days they are not financially responsible for.

According to both hospital respondents, some of the errors in the registrations are due to secondary factors as the capacity at the ambulance services or lack of the necessarily tools to help the patients. The hospital has the responsible to order transportation of the patient either to the nursing home and back home. If the ambulance does not have capacity the actual day, the patient has to spend another day at the hospital. The systems at the hospitals have no functionality in order to register these incidents.

Disagreements between hospital and municipality concerning the regulations of roles and responsibility for the two levels of care are also an explanation for the errors in the numbers from NPR. Numbers of days for patients ready for discharge must be adjusted for disagreements between the two, and the results affect the numbers either in favor to the hospital or the municipality.

**Number of days**

In 2014 hospital 1 issued bills for patients ready for discharge to 20 municipalities for 12 million NOK. This was 0.2 % of the annual budgeted income. The number of days for 2014 was 2835. The hospital also credited 1 114 650 million NOK in 2014. The hospital sends the basis for the invoice (number of days) and the invoice in parallel to the municipalities. The municipalities pay the invoice and if the control finds errors in the number of days, they have to send a complaint to the hospital. If the hospital agrees they send the money back to the hospital. The crediting was a result of poor documentation, disputes with municipalities regarding formalities in the discharge process, and errors in the hospital patient administrative system due to routines for registrations of the patients’ status during the hospital stay.
Hospital 2 on the other hand invoiced 12 municipalities with 13,5 million NOK in 2014 and the number of days for patients ready for discharge for each municipality varied from 12-1375 that year. This was an increase from 10,1 million in 2013. Hospital 2 has different routines for invoicing. The control of numbers of days is done before the invoicing. The hospital sends the basis for the invoice for control to the municipality before the invoicing and therefore has no crediting.

### 4.1.1 The units

The hospitals were chosen from the criteria set by the method. The large hospital is a centralized hospital with a large population within the region and municipalities in a close distance. Hospital 2 is a medium sized district hospital with 12 municipalities within a large district.

Figure 3.2 Hospital units

<table>
<thead>
<tr>
<th>Case:</th>
<th>Catchment area</th>
<th>People in region</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 1</td>
<td>20 municipalities</td>
<td>450 000</td>
<td>9 200</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>12 municipalities</td>
<td>220 000</td>
<td>4 000</td>
</tr>
</tbody>
</table>

The municipal units were chosen from the criteria defined by the method. Municipality A and B was within the region of hospital 1 and was examined as a case according to the interviews and the agreements. Municipality C and C were within the region of hospital 1 and were examined the same way.

Figure 3.3 Municipal units

<table>
<thead>
<tr>
<th>Inhabitants</th>
<th>Municipality A</th>
<th>Municipality B</th>
<th>Municipality C</th>
<th>Municipality D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11 000</td>
<td>17 000</td>
<td>45 000</td>
<td>2 400</td>
</tr>
<tr>
<td>Distance from hospital: in minutes</td>
<td>30</td>
<td>30</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>Coordination/organization</td>
<td>1 nursing homes Regional coordination office</td>
<td>2 nursing homes Regional coordination office</td>
<td>4 nursing homes</td>
<td>1 nursing home</td>
</tr>
</tbody>
</table>
4.1.2 The agreements -content

The agreements for care coordination between the two hospitals and the municipalities are mostly similar according to contents and structure, and are mainly in line with the mandatory minimum given by the Health and Care Services Act. Both hospitals have one overall agreement describing the main themes for cooperation and then several service agreements describing the different subjects for cooperation.

It appears that the agreements for coordination between both of the two hospitals and municipalities are regulating the interaction between the two levels as intended. Both agreements define roles and place responsibility according to the model for cooperation identified as an organizational instrument in the reform. However, there are some differences between the agreements when it comes to describing the process for discharge of patients:

Both hospitals have deadlines for when message for patient ready for discharge should be sent to the ordering office. The main difference is that hospital 2 revised their agreement in 2014, and then supplemented the section describing responsibilities and tasks with deadlines. They did not have this regulation before. The deadline for sending the message to the municipality with information of patient ready for discharge is between 08.00 and 15.30 am. If the message is sent between 08.00 and 13.00, the municipal financial responsibility begins the same day. If notice is sent after 13.00 the responsibility does not start before the next day. Further, hospital 2 has a deadline for the municipal response to message of patient ready for discharge. The deadline is set to 14.00 to confirm that they accept the patient.

Hospital 1 decided the deadline when the agreement was negotiated in 2011/2012 and have not revised it since. The rule is that message with patient ready for discharge should be sent as soon as possible, but not after 14.30 in the afternoon the same day the patient is ready for discharge. This also applies to Saturday/Sunday if, and only if the patient already receives services from primary care and there is no need for change in the services. Also, if the patient can return home it is ok to send messages in the weekends. Hospital 1 doesn’t have any deadline for the municipality to confirm acceptance of the patient.

Hospital 1 has two different agreements that regulate hospital and municipal roles and responsibilities in the process for discharge of patients. The main difference between the two is the deadline. The agreement with all the 20 municipalities in the district except for one (municipal E) have a deadline for sending messages for patient ready for discharge.
Municipality E coordinates patients from four different hospitals and “needed to harmonize their agreements in order to simplify the interaction between actors and coordination of patients” (14). According to informant at hospital 1 the deadline was removed after a revision of the agreement, and both parties agreed on the removal.

4.1.3 Documented routines in the municipalities

All the respondents (hospital and municipality) were familiar with the agreements and used them to explain how they had organized the coordination between the two levels of care. Especially the two respondents from the hospitals were very familiar with both structure and contents. This can probably be explained by their role as head of the department for coordination. Overall the respondents from the municipalities did not have the same detailed knowledge about the formal background for the agreements, but had good knowledge of implications for their own work and routines.

None of the municipalities had documented routines in the discharge process in addition to the agreements. However, respondent (R?) explained that: “in the beginning we had routines, because there are checklists to define a patient ready for discharge”. Further, the respondent explains that in the beginning, after implementing the financial responsibility, the institutions in their municipality were afraid they would receive patients too early. Meaning they did not have sufficient competence to treat them. “But it works, so we stopped using them”.

There seemed to be an agreement among both hospital and municipal respondents that there were a lot of mistakes in the invoicing from the hospital after the implementation of the regulation in 2012. Both levels of care had worked a lot with routines and quality assurance in order to improve the quality of the basis of the invoice and to have the correct number of bed days to issue bills for. For example, Hospital 1 changed the administrative routine for checking the invoices.

Communication- electronic message system (PLO)

The system for electronic messaging (PLO) is the main tool in coordination of patients between the two levels of care and constitutes the basis for the hospital invoicing for patients ready for discharge. Through my interviews I found that some of the coordination for
discharge patients is done outside the formal system for electronic messages. This is done either by making phone calls or process for discharge is conducted without the correct registrations in the electronic patient record. When this was the case it sometimes was difficult to decide who had the financial responsible for the patient.

Respondents on both sides are concerned about the communication as an obstacle when planning for the discharge of patients. Insufficient documentation is one of the issues mentioned by the respondents as a main reason for conflicts concerning the invoicing for days for patients ready for discharge. According to the service agreements sufficient information about the patient is one of the criteria for discharging a patient, and the respondent describes violations of this criterion as a problem.

4.1.4  How is coordination and cooperation experienced?

Changes in messaging practice

One of the respondents was of the opinion that the routines for registration of patients ready for discharge had changed after the implementation of municipal financing. According to him, the hospital tended “to register many of the patients ready for discharge the day after the admission and then send a withdrawal if the patient was not ready to leave the hospital the next day after all“. The hospital has no obligation to explain the decision to the municipality. According to him this happened in about 50% of the cases. The informant worked as a team leader in municipal D which was a very small municipality (Inhabitants <5 000). He had formerly worked at the hospital he explained about. The hospital new routines for registration caused problems for the municipality when they were to plan for the care to provide the patient after discharge. Small municipalities often have limited number of beds in their nursing homes, and the problem with this practice was that this resulted in empty beds that could have been used by others. The respondent also explained that patients ready for discharge should be prioritized according to their instructions/guidelines. As they only had one nursing home and limited number of beds, the result in their case was that “other municipal inhabitants must be put on hold”.
Several of the respondents (15) (16), (17), (18) said that since 2012 the municipality have recruited more health care workers, increased number of doctors and capacity in the nursing homes. The municipality had also established teams with physiotherapist, nurse and ergonomist (17).

When the patient is registered as ready for discharge the municipality has the responsibility to decide on proper care. According to respondent (19), the hospital sometimes tends to make promises to the patients on behalf of the municipality. This makes the patient expect something the municipality can’t provide. “We don’t even have a water pool..” he comments. The respondents also have experienced that the hospital personnel have many good advices as to proper treatment after discharge. They had also experienced that conflicts or disagreements on this matter resulted in withdrawal of patient ready for discharge.

The agreements regulate roles and responsibilities in the discharge process. Both hospitals have agreements that explicit state that the message from the hospital are not supposed to have any content with suggestions on proper care. Hospital 2 has in the agreement: *should not decide or give any guidelines concerning proper treatment for the patient after discharge.* Either way this is a common conflict between the two levels of care and sometimes the result is that the hospital refuses to discharge the patient. This is confirmed by (20). Then the municipal is freed for the financial responsibility and the hospital must pay the bill themselves.

**Poor documentation and communication**

Several respondents highlight that poor documentation is an ongoing source of conflict. “How they send it, I don’t know, but it seems like the standard is not good enough” (18). She further reflects on whether it is a lack of knowledge and “understanding of each other’s work and what we need in order to do our job”. This is supported by the other respondents from the municipalities, expressing problems concerning poor documentation on patient’s condition from the hospital before discharge.

Insufficient information of the patient’s condition causes problems for the ordering office to decide the proper service to offer the patient after discharge. As a result the ordering office requests further and more detailed information about the patient from the hospital. In worst
case this lacking information can lead to a defined conflict (disagreement) of whether the
definition of a patient ready for discharge is fulfilled.

The definition is formulated as a set of criteria to evaluate the patient. The definition is
regulated by the payment regulation and operationalized through the agreements. In some of
these cases the ordering office calls for withdrawal of the patient ready for discharge. (20)
The other alternative is that the hospital sends invoice as supposed to, but the municipality
refuses to pay because they believes it’s a violation of the agreement.

All the respondents expressed that they were satisfied with the system for standardized
electronic messages (PLO) used in the coordination between hospital and municipality. The
messages enable dialogue without using fax or telephone and patient information can be sent
between health care providers using encrypted messages. Although this “is a whole new
world” (16) the respondents from the municipalities (19) (18) stressed issues concerning
effectivity and quality in the dialog with the hospital. “We send a lot of messages back and
forward… we don’t get the answers to what we need to know” (18). As a result of poor
documentation the ordering office sends dialog messages to the hospital for more information
of the patient.

**Inter-municipal cooperation**

Five of the municipalities in relation to hospital 1 are organized in one regional coordination
office. The main purpose is to coordinate municipal interests and perspectives and to be an
“united voice in the negotiations of the agreements with the hospital” (16). The municipal
informant (16) is very satisfied with this arrangement and says this is a good effort and that
“the municipalities are a larger part up against the hospital, so they have become more
|equal…” (16).

She further explains that the office has made the cooperation between the municipalities
better, and that the cooperation has given her a network for exchange of information and
experience with the coordination of patients and agreements, but also “in cases that does not
involve hospital 1” (16).

The respondent at hospital 1 (14) is not all that positive to the office. According to the
informant the cooperation with the office is time consuming and in some cases he wish they
could just make a phone call and come to an agreement without spending several months
waiting for a response. He explains concrete cases where they had to wait up to half a year on a response from the regional office. A comprehensive system has to be consulted in order to make a consensus decision for five municipalities. This is contrasted by municipal D. “we have to do everything ourselves” he says when he explains about the discharge process and the dialog with the hospital.

Revision

The Health and Care Services Act regulates revision of the agreements. According to the act the agreements are to be revised once a year (ref). Hospital 2 revised and updated their service agreement on the discharge process in 2014. According to the informant at hospital 2 the process for this revision was simple and characterized by no conflict between the two levels of care.

Hospital 1 on the other hand, has tried to revise and update their agreement, but has not been able to so far. In particular they have wished to change the deadline for sending the message with patients ready for discharge to the ordering office. The department for coordination wish to “standardize and harmonize” (14) the agreements in order to improve the routines for discharge patients. They had tried to revise the service agreement for discharge of patients some year ago. The hospital had taken the matter to the national board for conflicts (Nasjonal Tvisteløsningsnemnd). The wanted revisions of the agreements stranded in a political decision by the hospital management to not change or revise any of the agreements. Both agreements have sections with regulations for revision of the agreements.

Control and administration

Both the hospitals and the municipality spend a lot of time and effort on control and administration. Prior to the invoice the hospital has a substantial routine for quality assurance of the attachments for the invoices in which involves the wards, the department for coordination and the economic department. A report is aggregated in DIPS and creates the basis for the invoicing. Then the numbers of bed days are checked on each respective department by the nurse in charge of coordination. Then the coordination department sends the invoice to the municipality and the municipality pays the bill. That is, if the ordering office agree on the number of bed days for the patient. Otherwise the ordering office sends a complaint. Then the hospital has to send the complaint back to the department and they have
to recheck the number. Hospital 1 sends the invoice and the attachments in parallel to the municipality. So if the complaint from the municipality leads to a changed conclusion – the hospital credits the municipality for the correct number of bed days.

The municipalities on their side also have a comprehensive regime for controlling the number of days they are invoiced for patients ready for discharge. Most of the respondents from the municipalities describe time-consuming routines for registration of days for patients ready for discharge. Two of the municipalities had their own register where they every day registered patients ready for discharge. This was an addition to the ICT system with the electronic patient record (EPR) for each patient. The reason for this was to plan for the capacity at the nursing home and to be able to control the number of days invoiced for patients ready for discharge. The other two municipalities gave the impression that they had so few patients and only one nursing home, so the information on each patient’s discharge process from the hospital were not stored other places than in the EPR.

*Practice for deadlines.* Excerpts from municipal complaints and answers from hospital 1 indicate differences in attitudes and practice of the regulations in the agreements. Different practice, especially around the deadline was also confirmed through the interviews.
5 Discussion

5.1.1 Main findings

Overall the economic implication of the payment regulation in the hospital is very small. The hospital income from municipalities for patients ready for discharge represents an insignificant part of the annual hospital budgets. Still, the attention remains high, and both specialist- and primary care spend much time and effort on administration and control of these funds. However, this study also demonstrated differences in municipal adaption to the payment regulation. Numbers show that the regional municipalities left their patients at hospital for more days than the municipalities within the region of the central hospital.

Successful planning of patient discharge is a prerequisite in order to invoice the municipalities without errors. However, the instruments introduced by the Coordination reform serve as mechanisms in an asymmetric relation between specialist and primary care and creates challenges for a successful transfer of patients between the two levels of care.

In the following characteristics of the discharge process and the power game as an explanation for the asymmetric relation will be discussed. Further, expected response to the instruments implemented by the reform from an economical perspective will be compared to the findings from this study. The study also found unintended outcome from the mechanisms. These outcomes will be compared and explained through public policy instrumentation.

5.1.2 The economical implication

One of the main findings from the study was that the economic implication for the hospitals where very small. The indirect costs for administration and control as a result of the payment regulation for hospital and municipality are not measured. However, both hospitals and municipalities spend much time on control and administration of the payment regulation due to errors in registrations of patients ready for discharge. The errors in the registration can be explained by a challenging coordination between the two levels of care. The intention behind
the payment regulation is earlier discharge of patients in order to treat the patient in primary health care. The goal is effectiveness and as a result cost reductions. A certain degree of formalization appears as a requisite for effectiveness increase. (21) The agreements and thereby the payment regulation construct a legal binding between the two levels of care, but also a formalization of the cooperation. Coordination will here refer to the least intense form of collaboration as when providers work independently and exchange information in order to harmonize their efforts. Higher formalization will also give rise to increased resource requirements. This is demonstrated both in this study and previous research. (22) (9) (23) This is disadvantageous both in that is necessities a higher outcome potential to be effective and that possible effects does not necessarily is placed with the same part as the one who accepted the cost (21). As for the administration and the control of the mandatory invoicing for patients ready for discharge from the hospital, it can seem as that the outcome and the indirect costs from this regulation is a disadvantage for the municipality. In order to the invoicing to be correct it presupposes a comprehensive regime for control in the municipalities, which can seem unfair as the sanctions as a mechanism is in the favor of the hospital.

5.1.3 The asymmetric discharge process

In this section the issue to be discussed is how the process for discharge of patients is facilitated in a manner that makes the coordination between the two levels of care challenging. How the instruments serve as a mechanism in this process will also be discussed.

Equality

Equalization between the two levels of care has been argued as a strong prerequisite in order to improve and develop sound coordination (24) (21). Coordination here refers to mechanisms to integrate activities between the two levels of care to facilitate appropriate service delivery (2). The agreement state equality between the two parties and regulates the roles and responsibilities for the two levels of care. However, as the two levels of care is regulated by different legislatives and financing systems the agreements contribute to the division of the responsible for the patient treatment. This study found that continuity and seamless patient
trajectory in the treatment of patients are still challenging. This is also proved by results from previous research (5).

The agreements serve as a mechanism in order to integrate the activities between the two levels and place the responsibility for discharge of patients with the hospital. The definition of a patient ready for discharge is made by the team at the hospital, and at this point the responsibility for the patient is transferred to the municipality where the patient is registered according to the National Registry. The decision is not a subject to collaboration between the two parties, but is up to the hospital alone to decide.

This can be challenging for the municipality as the hospital definition of a patient ready for discharge according to the agreements only takes into consideration when there is no more need for treatment in specialist care, but have no definition of what specialist care should be. The evaluation and the decision are delivered by the hospital and the power relation between the two is strengthened in the hospital favor. This relation challenges the ideal of equality for the two parts in the discharge process.

The agreements were implemented as an instrument in order to improve the coordination between specialist and primary care. Previous studies have found this mechanism has been used as a formalization of the cooperation between hospitals and municipalities for a long period before the implementation of the Coordination reform (23). It has also been demonstrated that new hospital routines with reference to entering into a contract with municipal authorities aimed to enhance interaction between the two care services has no effect on a patients´ stay at hospital (25). This can be interpreted in the direction of an insignificant effect of agreements on the improvement of coordination.

**Lack of understanding**

Conflicts between the two levels is also challenging as the evaluation of the patient is done by the team at the hospital with different competencies than in the municipality. Municipal respondents expressed that they experienced lack of understanding from the hospital concerning the ordering offices´ roles and responsibility. The ordering office needs sufficient information about the patient in order to plan for the care when he arrives home or at the nursing home. The ordering office also experienced “good advice “from the hospital considering proper care after discharge.
The discharging procedure is organized into a sequential flow of tasks (7), and formalized by the electronic message system (PLO) and all the communication between the care givers are supposed to be conducted in the system. The introduction of electronic messages represents a leap forward in the direction of effective coordination of discharge patients, however according to the respondents, there is still need for phone calls to get the information right about the patients. It is also a matter of differences in competencies between the two levels of care. The hospital teams produce knowledge of the patient in the hospital setting, and much of the information is transferred oral between personnel and from shift to shift. The formalization of the dialog between the two levels of care represents effectiveness in the coordination but the transformation of knowledge into adequate communication (26) and electronic messages are challenging.

The communication between the two levels of care is an obstacle in order to achieve a successful planning of – and discharge of the patient.

5.1.4 Outcome for the economic incentive

This section will discuss the outcome for the economic incentive for primary care and specialist care, and how this mechanism is assumed to affect the discharge process.

If the patient is registered as ready for discharge within the deadline, the municipal financial responsibility starts from day one. If, for some reason, the municipality doesn’t have capacity for the patient the mandatory hospital´ sanction mechanism with fees per day is activated. According to the payment regulation, the hospital´ invoicing for days for patients ready for discharge is mandatory. The fee is 4 387 NOK per day. The intention for this instrument is to give the municipality an economic incentive to provide care for the patient at the primary level, in order to discharge the patient and avoid the fee. Furthermore, the payment regulation makes it mandatory for the hospital to invoice the municipalities for days for patients ready for discharge. This mechanism places the sanction authority with the secondary care and strengthens the power at this level.

The premise for this incentive to be effective is that the primary health care provides a cheaper bed for the patient and that the municipal competence is equal compared to the
hospital. The likelihood of municipal engagement is affected by the perceived price of not complying with the regulation (27). Studies have found that the municipal capacity (volume of health care services) and competence can explain decrease in number of bed days for patients ready for discharge (9). The incentive presupposes organizational change and adaption in the municipalities. Given there is a correlation between the volume of municipal health care services and number of days for patients ready for discharge. The motivation for the municipal adoption to this incentive would depend on the nature and the magnitude of the penalty (27). The motivation is decided of whether it is cheaper to pay for more days in a hospital bed or build the capacity and competence needed to provide equal care in the municipality. Two of the municipal respondents explained that both municipalities had increased density of physicians at the nursing home, rooms had been built from single- to double room, and that more health care personnel had been recruited. They also explained a new profile for the competencies. Positions that had been filled with nursing assistants earlier were now possessed by nurses. These changes are in line with the expected response to municipal adoption and organizational change (5). These respondents were from case 1 and within the region of hospital 1. The results from this study show that the economic implication for hospital 1 was very small. The municipalities in the region explain that they have organized the primary care in order to accept patients early and avoid the fee.

On the other hand, numbers from hospital 2 show that the regional municipalities seem to leave their inhabitants more days at the hospital after the patient is ready for discharge than as was the results from the centralized hospital. The main differences between the municipalities in addition to the regional – centralized line of conflict were the distance to the hospital and their size. This can be interpreted in the direction of a division between the municipalities according to how they adapt to the reform. For some municipalities the fee they have to pay for the delayed discharge is more effective than to increase the municipal resources considering competencies and volume of care.
5.1.5 Intended and unintended outcomes

Changed routines for registration?

According to municipal respondents, the registration of discharge patients in the hospital has changed as a result of the payment regulation. In this section, the expected response to the economic incentive are discussed and compared to the outcome argued by the respondent.

Through the payment regulation, numbers show that the economic incentive has proven to give the intended effects as to earlier discharge of patients and transfer of the responsibility of patients from specialist to primary care earlier than what was done before the reform. This is coinciding with the hypotheses provided for institutional response to the instruments (3).

However, one can argue that the payment regulation, when applied to the institutions, have brought unintended effects as well. According to my municipal respondents, economic motives influence the discharge process at hospitals.

If the economical motivations as an influence on the hospital discharge process were to be explained by the payment regulation alone—it had to be the fee for days for patients ready for discharge. If the hospital register the patient as ready for discharge one day earlier and the municipality cannot provide care for the patient, the hospital gets to invoice the municipality for 4387 NOK per day. This explanation is very unlikely due to the estimated average daily cost for somatic discharge patients in St. Meld. No 47 (2008-2009) where the average daily cost for a somatic patient ready for discharge were set to 5000 NOK.

On the other hand, economical motivation as an indirect effect on routines at hospital is not unlikely. The increased attention on registration of patients ready for discharge after the introduction of the payment regulation can explain change in routines in the management and in the ward. In combination with continuously demands for production of large scale services and effectivity the personnel at the hospitals are probably affected by the demands.

Several studies found an increase in number of patients ready for discharge in the period of 2011 to 2012. However, none of the studies have been able to conclude on explanations for this due to poor data quality and different practices for registration of patients ready for discharge. Further, numbers show that in the category for patients discharged after one day in hospital, the rate for readmissions are higher than for patients discharged after two or three
The experience from the respondent and the statistics for patients ready for discharge can lead into speculations about selection as an influence on the practice for registration of patients.
6 Conclusions

This study has demonstrated that the hospital income from the payment regulation is insignificant. However, the economic incentive keeps the attention high at both specialist and primary level of care. Both levels spend relatively much time and effort on the administration and control of these funds. The study also found that successful planning of patient discharge is a prerequisite in order to invoice the municipalities without errors. However, the instruments introduced by the Coordination reform serve as mechanisms in an asymmetric and complex relation between specialist and primary care and a successful transfer of patients between the two levels of care are challenging.
Literature


Attachments