Municipal midwifery services in Norway

*The realization of policy guidelines within municipal midwifery services in the light of the Coordination Reform*

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Master Thesis
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UNIVERSITY OF OSLO

November 15, 2012
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2012

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Print: Reprosentralen, University of Oslo
SUMMARY

Maternity care service is a well-established service in Norway. Even though Norway has a high standard of maternity care, improvements are still needed when it comes to make the service more continuous throughout primary and secondary care level. The implementation of a planned change, i.e. the Coordination Reform, into a well-established system like maternity care in Norway, can trigger various forces, which can either enhance or constrain the realization of policy guidelines.

The newly introduced Coordination Reform in Norway receives a lot of attention in media and among researchers. One of the goals of the reform is to transfer duties from secondary health care to primary health care. This in order to achieve treatment on the lowest effective care level, while freeing up specialized resources on secondary care level to those who need them most.

One measure to achieve this goal are legal contracts, which shall be signed within various areas between local health trust and the municipalities. Agreements between the hospitals and municipalities within municipal midwifery care represent one of these contracts in the Coordination Reform. The content of this contract shall be led by the white paper on continuous pregnancy-, birth- and post-natal care. The design of the contract shall facilitate the implementation of new policy guidelines within maternity care.

The objective of this report is to explore how municipalities realize policy guidelines within midwifery care through the legal contract. The research is conducted by semi-structured interviews carried out with three informant groups in three municipalities in one county in Norway. The forces behind organization change represent the theoretical framework of the study and will be investigated.

The results show that various degrees of professional conflict between midwives and general practitioners were found in each municipality. It seems to be the case that none of the midwifery services in the municipalities have changed much. This is a surprising result given that the intent of the Coordination Reform within midwifery services instigates changes.

Nevertheless, municipal midwifery care is being developed, though not on the premises of the new policy guidelines within maternity care. One municipality has initiated a project in order
to facilitate the implementation of the new policy guidelines, but this happened independent from the contract about midwifery care.

The analysis has shown that theories within organizational change are supported by the findings in the three municipalities. In the following this can be summarized by:

- **Resistance determinants from organizational change theory are shown to be valid:**
  It has been found that some general practitioners seem to show reservation for plans of enhancing midwifery services by giving them a more coordinating role in antenatal and post-natal care. Through the theory, it is argued that such a change can threaten their identity/position within maternity care and maybe lead to a shift in the power balance. In addition, necessary new investments and the seemingly establishment of double work, i.e. maternity care services on primary and secondary level, can lead to resistance against change on an administrative level.

- **Success factors are proven to be necessary for successful implementation:**
  Success determinants like to convey the need for change, provision of resources, support from top-management, and a clear strategy have been proven to be important for the implementation of planned change. The two municipalities that did not fulfill these four criteria where also the ones, which did not seem to have implemented changes within midwifery care in connection to the Coordination Reform and the new policy guidelines within maternity care.

- **Conflict groups can enhance change:**
  It can be argued that the conflicting interests between professions in one of the municipalities has led to early initiation of the implementation of changes within midwifery care.

- **Leadership plays an important role in facilitating planned change:**
  The findings show that the leader in one municipality, which showed most of the characteristics of a charismatic leadership, has come furthest in the initiation of projects within midwifery care services.
ACKNOWLEDGMENTS

This year has been full of events for me, both good and bad ones. Through all these happenings I still tried to keep my focus on finishing my master thesis. In this process many people have helped and supported me. Therefore, I would like to take the opportunity now to thank them.

First of all, I would like to thank all the informants who participated in this study. All the information I could gather through the interviews was very valuable, and created the platform for this report. Thank you for your time and your interest in this thesis!
I would also like to thank experts and key players who provided me with background information in the field of interest in the beginning of the study.

My thanks go to my two advisors Associate Professor Trond Tjerbo and Associate Professor Lars Erik Kjekshus. Trond Tjerbo provided me with a motivating start into the process of conceptualizing the research topic of my thesis. Later in the process Lars Erik Kjekshus kept me on the right path when finalizing the report. Thank you both for your help and advise!

My fellow students and friends, both here and else where; thank you for your support and understanding during this busy year. I cannot name all of you in the fear of forgetting someone, but I especially like to thank for your advice in connection with my thesis and your moral support during this year. Thank you all!

Last, but not least, I owe my greatest thanks to my husband. Thank you for all your support during these years of study, and for most during this last year. You supported me both by encouraging me, by giving me valuable feedback during the writing process of my thesis, and especially by giving me the opportunity and the time to complete my degree in a busy family life. Thank you for everything!

You all have helped me to achieve my goal of finishing my master thesis. The last words I would like to say in memory to my mother: I’ve done it!

November 2012, Norway

Nora Gamst
# Table of Content

Summary ........................................................................................................................................ iii

Acknowledgments ........................................................................................................................ v

Table of content ............................................................................................................................ vi

List of tables ................................................................................................................................... vii

List of figures ................................................................................................................................... vii

Acronyms ......................................................................................................................................... viii

1. Introduction .............................................................................................................................. 1
   1.1 Research question .................................................................................................................. 3
   1.2 Maternity care and midwifery services in Norway ............................................................... 3
       1.2.1 Background .................................................................................................................... 3
       1.2.2 Reimbursement of municipal midwifery services ......................................................... 4
   1.3 Policies .................................................................................................................................. 5
       1.3.1 Policies within maternity care ....................................................................................... 6
       1.3.2 The Coordination Reform ............................................................................................. 8

2. Research methodology .............................................................................................................. 11
   2.1 Case study design ................................................................................................................... 11
   2.2 Sampling method .................................................................................................................... 11
   2.3 Interviews .............................................................................................................................. 13
       2.3.1 Informants ...................................................................................................................... 13
       2.3.2 Proceedings .................................................................................................................... 14
       2.3.3 Interview type and interview guide ............................................................................... 15
       2.3.4 Conducting interviews and transcription ..................................................................... 15
   2.4 Ethical guidelines .................................................................................................................... 16
   2.5 Reliability, validity and generalizability ............................................................................... 17

3. Theoretical framework .............................................................................................................. 19
   3.1 The Coordination Reform as planned organizational change .............................................. 19
   3.2 Success factors for organizational change ......................................................................... 21
   3.3 Reasons for resistance to organizational change ............................................................... 23
   3.4 Conflict groups as facilitator for change ............................................................................. 24
   3.5 Charismatic leadership as facilitator for change ................................................................. 25
   3.6 Summary ............................................................................................................................... 26
4. Results ................................................................................................................................................. 27
   4.1 Municipalities ................................................................................................................................. 27
      4.1.1 Cooperation .............................................................................................................................. 29
      4.1.2 Capacity and competence ......................................................................................................... 32
      4.1.3 Changes due to the Coordination Reform ................................................................................. 36
   4.2 Contract ........................................................................................................................................ 39

5. Analysis ............................................................................................................................................... 41
   5.1 Resistance ...................................................................................................................................... 41
   5.2 Success factors ................................................................................................................................. 44
   5.3 Conflict groups ............................................................................................................................... 48
   5.4 Leadership ..................................................................................................................................... 49
   5.5 Limitations of the study .................................................................................................................. 49

6. Concluding remarks ............................................................................................................................. 52

References ............................................................................................................................................... 56

Appendices ............................................................................................................................................... 59
   Appendix I: Description of data use from SSB in selection of units for analysis ................. 59
   Appendix II: Interview guides for first round of interviews (pilot interviews) ................. 60
   Appendix III: Interview guides for second round of interviews ........................................ 62
   Appendix IV: Definition of concepts within maternity care ................................................. 66
   Appendix V: Policy guidelines and interview guide topics ......................................................... 68

LIST OF TABLES
Table 1: Background information about municipalities ................................................................. 28

LIST OF FIGURES
Figure 1: Maternity care on primary and secondary care level ...................................................... 3
Figure 2: The Coordination Reform in connection with maternity care services ....................... 5
Figure 3: Success factors for organizational change ..................................................................... 21
Figure 4: Resistance determinates for organizational change ...................................................... 23
Figure 5: Professional conflict as conflict groups in dialectical theory ...................................... 24
Figure 6: Charismatic leadership ....................................................................................................... 25
Figure 7: Summary of theoretical framework in connection with the structure of the implementation of new policy guidelines through the Coordination Reform ....................... 26
**ACRONYMS**

<table>
<thead>
<tr>
<th>ACRONYM</th>
<th>Description</th>
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<tbody>
<tr>
<td>CMMO</td>
<td>Chief Municipal Medical Officer (in Norwegian: kommuneoverlege)</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner (in Norwegian: fastlege)</td>
</tr>
<tr>
<td>HD</td>
<td>The Norwegian Directorate of Health (in Norwegian: Helsedirektoratet)</td>
</tr>
<tr>
<td>HOD</td>
<td>The Ministry of Health and Care Services (in Norwegian: Helse- og omsorgsdepartementet)</td>
</tr>
<tr>
<td>HT</td>
<td>Health trust (in Norwegian: helseforetak)</td>
</tr>
<tr>
<td>KS</td>
<td>Norwegian Association of Local and Regional Authorities (in Norwegian: Kommunesektores organisasjon)</td>
</tr>
<tr>
<td>LEON</td>
<td>Lowest effective care level (in Norwegian: lavest effektivt omsorgsnivå)</td>
</tr>
<tr>
<td>NSD</td>
<td>Norwegian Social Science Data Services (in Norwegian: Norsk Samfunnsvitenskaplig Datatjeneste AS)</td>
</tr>
<tr>
<td>ABPC</td>
<td>Antenatal-, birth- and post-natal care (in Norwegian: Svangerskaps-, fødsel- og barselomsorg)</td>
</tr>
<tr>
<td>PHC</td>
<td>Public Health Center (in Norwegian: Helsestasjon)</td>
</tr>
<tr>
<td>PHN</td>
<td>Public Health Nurse (in Norwegian: helsesøster)</td>
</tr>
<tr>
<td>RHT</td>
<td>Regional health trust (in Norwegian: Regional helseforetak)</td>
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1. **INTRODUCTION**

Maternity care (i.e. antenatal-, birth- and post-natal care) has a high standard and quality in Norway. Norway is, for example, among the top 10 countries in the OECD with lowest infant mortality\(^1\) and lowest premature mortality measured in potential life years lost\(^2\) (OECD, 2011). Furthermore, maternal mortality is one of the lowest in the world in Norway, with only seven mothers dying per 100 000 livebirths in 2008 (WHO, 2010).

Nevertheless, a white paper about maternity care published in 2009 states that maternity care can still be improved in Norway. It recognizes that pregnant women and women in labor can still experience fragmentized and inaccessible maternity care services (St.meld. nr. 12, 2009, p. 7-8).

“A mapping of midwifery care in 2003 shows that the service offer is geographically skewed, and that the coverage is inadequate. The biggest challenges are in urban areas with many pregnant women, and in the district with large distances. Because of small employment percentages the challenge today is to recruit midwives in all municipalities.” (St.meld. nr. 47, 2009, p. 70)

Therefore, the government has set as a goal to create more continuous maternity care services of high quality, and a family-friendly post-natal care by creating a continuous patient flow through primary and secondary care level (St.meld. nr. 12, 2009, p. 7) To achieve this goal, alternative organization forms within maternity care shall be evaluated in order to utilize resources and personnel more efficiently.

“The local midwifery should be more accessible and the service to a woman both before, during and after birth shall be characterized by continuity regardless of whether a municipality or a local health trust is responsible.”

(Utviklingsstrategi for jordmortjenesten, 2010, p. 2)

On January 1\(^{st}\), 2012 the Coordination Reform was introduced in Norway. The target of this reform is to improve the cooperation between primary and secondary health care services, i.e.

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1 The infant mortality rate is the number of deaths of children under 1 year of age in a given year, expressed per 1 000 live births.

2 Potential years of life lost (PYLL) is a summary measure of premature mortality, providing an explicit method of weighting deaths which occur at younger ages.
between municipal health services and hospitals. Within the area of maternity care, the white paper about the Coordination Reform (St.meld. nr. 47, 2009, p. 70-71) is recommending that local midwives shall have a central role in pregnancy check-ups and post-natal care in cooperation with hospitals, public health centers and general practitioners in the municipalities. Legally binding contracts in various areas between the two parties are one measure in the reform to create more continuous health care services. One of these contracts shall be signed within midwifery care.

The objective of this study is to investigate if midwifery service in municipalities has changed in accordance with policy guidelines within maternity care as intended in the Coordination Reform. A further objective is to explore the legally binding contract within midwifery services in the Coordination Reform. Given that the Coordination Reform can be considered a planed change, organizational change theories will be applied in the analysis of the results. This with the aim to explore if the proposition of the theories can be employed and confirmed within this planed change. Possible explanations based on organizational change theories will be presented to explain why municipalities act and respond the way they do.

By addressing these issues we may see if the goals of the white papers (cf. St.meld. nr. 12, 2009; St.meld. nr. 47, 2009) are met. More specifically, detailed knowledge can be gained about the effects of the Coordination Reform in an area, which got little attention compared to other parts of the reform so far. It is important to cast a light on all parts of the Coordination Reform in order to be able to evaluate it as a whole. The analysis of the collected data can help to give feedback to policy makers on how the white paper and guides to the Coordination Reform have been interpreted so far, i.e. what the contracts contain and if they have an effect on the area in question. The report can also help to give an insight into how municipalities act and react to planed change that shall be implemented in a well-established system, like the one within maternity care.

In the following, the research question of this study will be described. Thereafter, background information will be given upon maternity care in general, and midwifery services in particular (section 1.2). The key policies within this study will be described in more detail in section 1.3, namely policies within maternity care and the Coordination Reform.
1.1 Research question

The research area of this study is how a planed change, e.g. a reform, is received and implemented within midwifery services in municipalities. In this study the planed change are the contracts in the Coordination Reform and the realization of suggested policy guidelines within midwifery services through one of them. On this background the following research question is formulated:

“Have policy guidelines within maternity care been realized through the contract on midwifery services in the Coordination Reform? If not, why not?”

The research will be conducted in two ways: a) by in-depth interviews with health care workers and leaders in municipalities within maternity care, and b) by exploring the negotiated contract within municipal midwifery care.

1.2 Maternity care and midwifery services in Norway

Today, two professional groups offer maternity care services in Norway. Specialized doctors at hospitals and general practitioners in municipalities preform maternity care services in cooperation with midwives on both care levels, as shown in Figure 1.

![Figure 1: Maternity care on primary and secondary care level](image)

1.2.1 Background

Traditionally, general practitioners preformed primary maternity care services. In the late 1970s the amount of antenatal deaths, which could have been prevented, was rising. This triggered a public discussion and was followed by recommendations to increase the number of pregnancy check-ups. As a key indicator for success it was acknowledged that midwives had to play a more central role and that their specific knowledge of maternity care had to be utilized in order to offer a qualitative good service. From 1995 municipalities were bound by
law to offer midwifery services. Women shall have the possibility to choose, which profession shall carry out the follow-up (St.meld. nr. 12, 2009). National clinical guidelines for antenatal care recommend a combination of midwife and doctor consultations during pregnancy (Retningslinjer for svangerskapsomsorgen, 2005). In 2003 a regulation (cf. Forskrift om helsestasjons- og skolehelsetjenesten, 2003) was implemented, which included midwifery service in public health centers at the municipalities (St.meld. nr. 12, 2009, p. 23-25). In this regulation it is specified that the public health centers shall offer the following services for pregnant women: health checks, counseling and if necessary referral to other health institution. In addition, they have the task to offer information and counseling courses about birth, parenting, and partnership (St.meld. nr. 12, 2009). From January 1st, 2012 municipal midwifery service is regulated by the new law on municipal health and care service (cf. Helse- og omsorgstjenesteloven, 2011), which is replacing the previous law ‘Kommunehelsetjenesteloven’ after the introduction of the Coordination Reform.

Because of this division of maternity care in municipalities, conflicts between the professions flare up occasionally in media, and can be seen as an underlying problem area within maternity care issues. The issues problematized are among others questions about the amount of consultations women should have, and connected to that a possible overproduction of consultations (Eiring, 2011). Further, it is discussed which profession has a better approach to antenatal consultations, i.e. midwives with a more relational and social approach or doctors with a more medical approach (Nupen, n.d.).

In 2000 there were 253 labor-years\(^3\) for midwives. In 2008 the number increased to 295 labor-years. This means an increase by 42 labor-years in 8 years, i.e. 5,25 labor-years or 1,76\% per calendar year. This also means, we can find an average of 0,6 labor-years in each municipality in Norway (Utviklingsstrategi for jordmortjenesten, 2010, p. 17).

1.2.2 Reimbursement of municipal midwifery services

The municipality can either employ local midwives directly or they can work at local health trust, i.e. hospitals. Municipalities have the possibility to purchase midwifery services from the hospital. Another alternative is midwives working in the private sector who have a

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\(^3\) Unit of work representing the productive effort of one person in a 12-month period. URL: http://www.businessdictionary.com/definition/man-year.html
contract with the municipality and get an operating grant for their services from the municipality (Utviklingsstrategi for jordmortjenesten, 2010, p. 16).

Midwives employed by the municipality get a regular monthly payment. The National Insurance Scheme in Norway (in Norwegian: Folketrygd) is responsible for reimbursing health care services outside health institutions or municipalities. The law states (Folketrygdloven, 1997, § 5-12) that the National Insurance Scheme is reimbursing pregnancy check-ups and deliveries outside institutions carried out by midwives. Further, a regulation issued in 2012 is specifying the conditions for these reimbursements and the tariff (Forskrift om utgifter til jordmorhjelp, 2012).

1.3 Policies

The underlying policies in this study are two-folded. Firstly, policies within the area of maternity care will be elaborated. Secondly, the focus is on the new Coordination Reform. This health care reform is aiming at better coordination of health care services between the primary and secondary care, as it will be shown in section 1.3.2. An overview of the overall concept of the Coordination Reform, the role of the contract within midwifery services, and the implication of the policies within maternity care are visualized in Figure 2.

Figure 2: The Coordination Reform in connection with maternity care services
1.3.1 Policies within maternity care

The first focus area in this study is maternity care policies, and is based on three reports:

a) the white paper about maternity care,

b) a quality guide for maternity care, and

c) a development strategy for midwifery services in Norway.

The Norwegian Ministry of Health and Care Services issued the white paper about maternity care on behalf of the government. It was published in 2009 with the name: St.meld. nr. 12 “En gledelig begivenhet. Om en sammenhengende svangerskaps-, fødsels- og barselomsorg” (in English: Report to the Storting No. 12 “A happy event. About a continuous pregnancy-, birth- and post-natal care”). The main goal of the report is to offer pregnant women and their families an integrated and continuous health care service within the maternity field. To achieve this goal the government wishes to improve the organization of maternity care service in Norway, as well as improve the utilization of the existing health care workers and resources within this field. An efficient collaboration between health care workers, i.e. midwives, GPs and public health nurses, is emphasized. The professional qualifications of both midwives and GPs should be taken advantage of and should complement each other (St.meld. nr. 12, 2009, p. 27-28). Further, the government recognizes in this report that midwives play an important role in Norwegian maternity care. Municipal midwifery service shall be strengthened in order to take on a more central role in the care process, i.e. from pregnancy, through giving birth, to post-natal care. To achieve this, public health centers, under which midwifery services are usually organized in municipalities, have to acquire the necessary competence and capacity to be able to carry out additional post-natal follow-up (St.meld. nr. 12, 2009).

The quality guide about maternity care is issued by the Norwegian Directorate of Health and is based upon the intentions in the white paper describe above. It was published in December 2010 under the name: “Et trygt fødetilbud – Kvalitetskrav til fødselsomsorgen” (in English: A safe maternity service – Quality requirements for maternity care). The guide is suggesting eleven quality measures within maternity care. Further, it suggests actions in connection with the Coordination Reform. For example, the importance of good IT systems for information exchange is emphasized, the flexibility of midwives to work on both care levels, primary and secondary, is highlighted, and the development of standardized routines and procedures

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4 The Norwegian Directorate of Health is an executive agency and competent authority subordinate to the Norwegian Ministry of Health and Care Services.
between health care workers as a necessary tool is stressed. Within pregnancy follow-ups the focus shall be on being able to differentiate between healthy pregnancies and pregnancies with risk involved. Selection criteria are suggested. In post-natal care municipal midwifery services shall have the responsibility for follow-ups in cooperation with GPs and public health nurses. This entails that there is enough capacity and professional competence in the public health centers within maternity care. Public health centers and midwifery services shall overlap each other and secure a good transition of follow-ups from midwives to public health nurses (Et trygt fødetilbud, 2010, p. 13-19).

The last report to be mentioned was published in May 2010 by the Norwegian Directorate of Health with the name: “Utviklingsstrategi for jordmortjenesten – Tjenestekvalitet og kapasitet” (in English: Development strategy for midwifery services – Quality of service and capacity). This report is promoting actions, which shall strengthen midwifery services with respect to capacity and quality. It suggests measures in six areas. Among these are for example a) the need for a comprehensive and coordinated organization and task distribution between municipal and hospital health care services, b) the maintenance of competence within midwifery services and c) suggested actions in order to ensure continuous maternity services, where one midwives has the overall responsibility for the whole follow-up process (Utviklingsstrategi for jordmortjenesten, 2010).

The repeated message in these three reports can be summarized in two main points with several concrete actions:

- Create continuous maternity health care services by
  - establishing standardized routines for task distribution
    - between care levels, and
    - between health care workers in the municipality.
  - giving municipal midwives a central role in the care process.
  - introducing IT systems for better information flow.

- Ensure capacity and quality within maternity care in municipalities by
  - improved resource utilization between care levels.
  - increasing professional competence of health care workers, i.e. midwives and public health nurses, at public health centers.
  - following suggested selection criteria for pregnancies at risk.
The white paper about maternity care (St.meld. nr. 12, 2009) is the point of departure for both the quality guide and the development strategy report. The Coordination Reform (St.meld. nr. 47, 2009) also refers to the reports and the white paper within maternity care. The reform advises that the suggestions from these three reports shall be followed and included in the contract to be signed between municipalities and local health trusts.

1.3.2 The Coordination Reform

A good coordination of primary and secondary health care services is crucial and has challenged the health care sector in many years. This has triggered a new health care reform in Norway. The Coordination Reform (St.meld. nr. 47, 2009) shall address these challenges, which among others include the patients’ need for continuous health care services.

The Coordination Reform is illustrated in St.meld. nr. 47 “Samhandlingsreformen. Rett behandling – på rett sted – til rett tid” (in English: The Coordination Reform. Right treatment – at the right place – at the right time) and was published in 2009. The white paper (St.meld. nr. 47, 2009) points out the general challenges the Norwegian health care system is facing today. According to the report these challenges are social, economical and health related in nature. The three main issues are:

a) The patients need for coordinated health services beyond institutions and the level of service, i.e. primary and secondary care.

b) The low focus on preventive health care services, which are mainly the responsibility of the municipalities.

c) The demographic and epidemiological development towards an older population with growing chronicle disease, which prompts a future challenge to the Norwegian welfare system.

The growing health care expenses in Norway, as well as in the world, additionally enhance these challenges. Five main areas of action have been suggested to address these challenges (St.meld. nr. 47, 2009): increased patient involvement, increased municipality responsibility, use of economical incentives, efficient use for secondary health service level, and correct prioritization between care levels. In the light of maternity care, these five measures of the Coordination Reform, can be interpreted in the following way (Utviklingsstrategi for jordmortjenesten, 2010; Et trygt fødetilbud, 2010):
1) Patient involvement; pregnancy, delivery and the period after birth are one integrated process, which need coordinated health care services. In the ideal case, this means that women have to encounter as few new health care workers as possible. Security and comfort can be built by giving users one person to relate to in the process (Utviklingsstrategi for jordmortjeneste, 2010, p. 48-51).

2) Municipal responsibilities; maternity care and pregnancy check-ups are seen as part of the preventive health care work a municipality is obliged to do. According to their new responsibilities municipalities shall also map how they can offer pregnant women the best care and the appropriate level of care. This entails that women with the need for specialist care are referred to such. But at the same time a holistic view of the whole process (pregnancy, delivery, and postnatal period) has to be considered in order to maintain an integrated health care service.

3) Economical incentives; according to the Coordination Reform economical incentives shall be established to support the implementation of the goals mentioned above.

4) Specialist health care; specialist health care services shall be used when needed. Experts at secondary level shall follow-up complications in pregnancies, difficult pregnancies and other risk factors. Therefore, a good selection of pregnant women to the right level of care is essential. Ordinary check-ups and counseling courses can be handled at primary level in order to free up capacities at secondary level.

5) Healthy users shall not have to compete for services at hospitals with users in need of these specialty services. This measure can be interpreted in the way that women with a normal pregnancy shall get a standardized follow-up program, which also includes scheduled appointments at the hospitals, as it is practiced today. At the same time, this offer shall not interfere with the hospitals capacity to offer specialist care to those women who need it.

According to the Coordination Reform, municipalities and local health trusts are required to negotiate contracts about their future cooperation. This obligation is legally bases in the law (Helse- og omsorgstjenesteloven, 2011, § 6-19).
The purpose of these cooperation contracts is, among others, to clarify the responsibilities and task distribution between municipalities and local health trusts, to implement coordination and cooperation measures, and to ensure treatment at the lowest effective care level (LEON) (Lovpålagte samarbeidsavtaler mellom kommuner og regionale helseforetak/helseforetak, 2011, p. 8).

Also within municipal midwifery service a contract has to be signed between the municipality and the local health trust. The deadline for the signature of this contract was set to July 1st, 2012 (Lovpålagte samarbeidsavtaler mellom kommuner og regionale helseforetak / helseforetak, 2011, p. 15). According to the Coordination Reform, these contracts shall among others include measures, which a) maintain the professional competence of midwives, b) secure local midwives a central role in maternity care services both ante- and post-natal in cooperation with GPs and public health centers and c) include emergency preparedness schemes (St.meld. nr. 47, 2009, p. 71).

A national guide for the formulation of these contracts, further specifies that the contract ought to a) describe how the recommendations in the guide about quality in maternity care shall be met (cf. Et trygt fødetilbud, 2010), b) describe how interdisciplinary cooperation and exchange of information shall be established, c) elaborate how to develop decentralized and differentiated maternity care, and d) define cooperation arenas (Lovpålagte samarbeidsavtaler mellom kommuner og regionale helseforetak/helseforetak, 2011, p. 22).

The negotiations in the Norwegian counties between municipalities and health trusts were carried out in various ways. In some counties the Norwegian Association of Local and Regional Authorities (KS) has played a major role as coordinator and initiator in the negotiations processes, whereas in other counties several municipalities have collaborated to negotiate contracts with the health trusts by themselves.

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5 KS: employers’ association and interest organization for municipalities, counties and local public enterprises in Norway.
2. **Research methodology**

2.1 Case study design

This study is following an in-depth case study research design. A case study is defined to be “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context…” (Yin, 2009, p. 18). Further, Yin (2009) argues that a case study research should be applied “when a ‘how’ or ‘why’ questions is being asked about a contemporary set of events, over which the investigator has little or no control” (Yin, 2009, p.13). The stated research question fulfills these criteria, since the study analyzes how municipalities have realized new policy guidelines through one of the contracts in the Coordination Reform. The why question will be answered by analyzing why the municipalities have acted in the way they did. The investigation will be conducted through qualitative methods, namely in-depth semi-structured interviews. This creates an empirical research, which is set in a real-life context. Therefore, this study fulfills Yin’s criteria about the investigation of a contemporary event, which the investigator cannot influence.

The case of this study is defined to be realization of guidelines in the field of interest as described above. “One rational for a single case study is when it represents the critical case in testing a well-formulated theory […]” (Yin, 2009, p. 47). The rational of such a single case study is to determine if a theory can be confirmed, challenged or extended (Yin, 2009, p. 47). This thesis will represent the realization of new policy guidelines through a reform by testing if organization change theory and the propositions for successful planed change are confirmed or challenged by the findings.

2.2 Sampling method

Three municipalities are selected in this thesis in order to be able to investigate the research question. Therefore, this study represents an embedded case study design with multiple units of analysis (Yin, 2009). In the following, it will be elaborated how these embedded units were selected.

In the first step of the selection process 1 out of 19 Norwegian counties was chosen. The choice of the county is based on convenience sampling, which entails that the county has been
chosen because it is close to hand and to the convenience of the researcher. This county consists of 26 municipalities.

McClintock (1985, p. 207) states that “… probability sampling and statistical generalizability are not compatible with the case study method. Sampling is appropriate, however, as a means of representing or assessing variability among processes within a case and comparing this variability to that of other cases or conceptual frameworks […]” On the background of this, a case cluster sampling procedure was chosen for the selection of municipalities (McClintock, 1985, p. 207-208).

The process unit of analysis, i.e. a cluster of processes, is defined to be a municipality. Thereafter, clusters are selected in which the process of interest is expected to happen (McClintock, 1985, p. 207-208). A criterion was identified that shall ensure that selected units will yield relevant data. This criterion is the need of maternity care in the municipality. The need is defined by two variables. The first variable is the number of women between 20 – 34 years of age, who are living in the municipality. The assumption is that women in this age group are the ones likely to get children. This is based on the fact that the average age in the chosen county for women to get their first child is 29 years (cf. Statistics Norway). Based on the data available at Statistics Norway and the biological fact that women are able to get children earlier than the age of 29 years, the age group boundaries were selected to be 20 to 34 years. The proportion of women getting children outside this age boundary is little, and therefore considered to be not significant in the need criterion. The second variable, pointing at the need for midwives and other health care workers in a municipality, is the actual number of livebirths in the municipalities. This variable is reflecting the need of maternity care since it gives an insight into how many women actually have been pregnant and given birth in the municipality. Further information how the numbers from Statistic Norway have been handled can be found in Appendix I.

In the selection process, those municipalities were considered, which scored highest on the need criterion. This is in order to select cases, which are likely to show results, i.e. likely to implement changes in their midwifery service. The underlying assumption is that municipalities that have a low need for maternity care services, might not offer midwifery services themselves, but work together with other municipalities, because of low demand. Counter arguments for this assumption can be found in section 5.5: limitations of the study.
High score is defined as the first quarter, i.e. the first 25 percent, on the ranking, which means the first six municipalities by a total of 26 municipalities. Due to the time frame and scope of the study the top five municipalities were selected in the first round. Out of these four chose to participate. The fourth municipality, which was initially part of the study, was excluded from analysis due to difficulties in data collection, i.e. access to informants. Finally, three municipalities were included as units of analysis in this study.

The processes of interest in a cluster can be defined as roles or positions of employees in a municipality. The relevant positions were identified in order to be able to investigate the field of maternity care (McClintock, 1985, p. 207-208). This selection is further elaborated in the next chapter.

### 2.3 Interviews

#### 2.3.1 Informants

The primary informants at the municipalities were local midwives, local leaders in the health care sector, and the chief municipal medical officer (CMMO). A challenge was to select leaders at the same level in the hierarchal system in the municipalities. Since municipalities can have a different organizational structure and different titles for their leaders, an investigation of the organizational structure was needed. Despite this, it was still not possible to interview informants on the same leader level in each municipality due to time and access challenges.

The reason to conduct interviews with these three informant groups, i.e. local midwives, local leaders and chief municipal medical officers, was to get a broad perspective on municipal maternity care. These three informant groups were identified as those groups, which are involved in maternity care services, i.e. pregnancy check-up and post-natal follow-up. In addition to midwives, also general practitioners carry out services within maternity care. Usually, there is a large number of GPs in a municipality, and the decision was made to interview the chief municipal medical officer in each municipality. The chief municipal medical officer is the head of all GPs employed in the municipality and is in charge of the general practitioner service. The involvement of local leaders serves two purposes. Firstly, it

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6 Note section 5.5 for limitations on this selection.
will be possible to analyze if the information received from the different informants corresponds to each other. Secondly, it is possible to map plans and future projects within municipal maternity care, since local leaders within maternity care will naturally be involved in these.

2.3.2 Proceedings

According to the case selection process five municipalities were contacted via E-mail in the first round. The E-mail was addressed to the local leaders of the health care section in the municipality or the leading public health nurse. The message presented the researcher and the research project shortly. It asked for an interview with the contacted person and the midwife in the municipality. In case of interest, the contact person was asked to forward the inquiry to the local midwife. Attached to the E-mail was a PDF-file with further detailed description of the project and its purpose. In this file the interview candidates were as well informed about their possibility to resign from the project at any point in time (cf. section 2.4). Chief municipal medical officers were contacted directly by phone and informed about the study and the interview. In case of positive answer to participate the information PDF-files was sent to them via E-mail.

Three municipalities were contacted in mid March 2012 via E-mail with the intention of two interview rounds, one immediately and one in August 2012. This procedure was chosen in order to carry out pilot interviews, i.e. the first interview rounds. This is also coherent with the cluster sampling procedure where clusters, i.e. municipalities, are probed by interviews in order to enumerate the positions, i.e. employees, of interest for the final selection (McClintock, 1985, p. 207-208).

Two of these three municipality participated in the study, whereas one chose not to. Therefore, pilot interviews with the midwife and the contacted leader were preformed in the two participating municipalities in Spring 2012. After this first round of interviews, it became clear that more municipalities and a more elaborate interview guide were needed. Additionally, the view of doctors working within maternity care needed to be included as well.

Another two municipalities were therefore contacted early July 2012 via E-mail with one interview round planed, but with an extended interview guide. The first to municipalities were
interview again as well, during August and September 2012. This also applies to all chief municipal medical officers in each municipality.

2.3.3 Interview type and interview guide

This thesis used semi-structured interviews in order to be able to perform an in-depth study of the research question. The interview guide represents the structured part of the interview. It is a list of questions and topics that should be covered during the interview. This is important and essential because in this way it is possible retrieve the same type of data from all the informants. The “semi” part of this interview type is the fact that the list of questions in the interview guide is only giving a direction to the interview, but that the interviewees can bring up topics themselves and this allows a two-way communication between the researcher and the informant. This is necessary to get a good insight into the event under study.

The interview guide was adjusted to each group of informants but with the same type of guiding questions. Due to two interview rounds, i.e. pilot interviews and the second interview round, two interview guides were in use. The first interview guide was used only for the municipalities contacted in March 2012. The second interview guide was employed in all the municipalities. The interview guides can be found in Appendix II and Appendix III.

2.3.4 Conducting interviews and transcription

The interviews were conducted in Norwegian language and recorded with a digital audio recorder. Notes were not taken during the interviews in order to be able to concentrate more on the interview and the interviewee during the process. Further, the recording of interviews was more favorable in order to be able to lead the interview in the right direction and to be able to reflect about the information given and listen to the interviews at a later point in time.

The drawbacks of recording were taken into consideration. The informants were put at ease when becoming nervous about the recording. Further, the recorder was placed out of sight as much as technically possible. It was attended to that after the recording equipment was switched off no more important information was exchanged between the researcher and the interviewee if possible. If some relevant information was mentioned nevertheless, the researcher made notes of these immediate after the interview situation.
The transcription of the interviews was carried out in two steps. First a word-for-word transcription was completed. In the second step, the interviews were transformed into a more formal and written-style. The two-step process was chosen, firstly, to ensure that all the information was taken in, and in the second step, to make the data easier to analyze later. Irrelevant parts of the interviews were not transcribed. Intonations, pauses and emotional expressions were neither included. This is because it was not consider relevant in order to be able to answer the research question. Places, names and other information, which can endanger the anonymity of the project, were coded or excluded from the transcription (Kvale, 1996).

2.4 Ethical guidelines

Ethical considerations were made throughout the whole process of this study. The study was approved by the Norwegian Social Science Data Service (NSD)\(^7\), two times; once at the start of the study, and once after methodological changes during the study. This approval means the research is conducted according to the Personal Data Act in Norway.

Informed consent was obtained from all informants. Informed consent implies that the interviewees are made adequately aware of what kind of information the study seeks from them, why it is sought, how it will be used and how the interviewees are expected to participate. This consent shall be voluntary and without any pressure of any kind (Kumar, 2005, p. 212). To accommodate these requirements, the interview candidates were sent an invitation to interview with details about the study, its purpose and how it is to be conducted. The candidates were informed about that they could withdraw from the study at any point in time without having to explain the reason for their withdrawal. On interview day this information was repeated to them verbally to assure their consent. Each interviewee signed the invitation letter before the interview started.

Confidentiality was maintained. Confidentiality implies that “sharing information about a respondent with others for purpose other than research is unethical” (Kumar, 2005, p. 214). Further, the source of the data collected cannot be known, i.e. shall be anonymous (Kumar, 2005, p. 214). The interviewees were informed about that their identity, the place and the location of the research were anonymous and protected. Names and places were coded or

\(^{7}\) NSD is the Data Protection Official for Research for all the Norwegian universities, university colleges and several hospitals and research institutes. URL: http://www.nsd.uib.no/nasd/english/pvo.html
deleted from record throughout the thesis in order to secure anonymity. Transcribed
interviews and the audio files were only accessed by the researcher.

2.5 Reliability, validity and generalizability

In case studies there are four criteria, which allow evaluating the quality of the case study. These are a) construct validity, b) internal validity, c) generalizability and d) reliability (Yin, 2009).

Yin (2009, p. 40) defines construct validity as “identifying correct operational measures for the concepts being studied”. Construct validity is supposed to secure that findings in a case genuinely reflect the events that happened in that case. The danger lies in the fact that the reported findings could be based on the impressions of the researcher rather than on facts (Yin, 2009, p. 41). A method to overcome this challenge entails that firstly, the effects have to be defined by specific concepts, which relate to the objectives of the study, and secondly operational measures have to be identified, which can fit these concepts (Yin, 2009, p. 42).

Following Yin’s (2009) explanation, the effects found in the municipalities have to be conceptualized. Themes to be investigated have been extracted from the interviews in accordance to their relevance to the theoretical framework. These themes are expressed in the results. Operational measures for these themes were hard to establish because of the qualitative nature of the data. Nevertheless, some results, which can be more easily translated into operational measures, are described as background information on the three municipalities (cf. section 4.1). With this the study has approximated the two-step method by Yin (2009). Further, construct validity is strengthened by the use of multiple sources of evidence and by having the draft of the study be reviewed by a key informant (Yin, 2009, p. 42). Multiple sources of evidence have been used since both interviews and contracts were analyzed. The study has not been send to a key informant for review, but citations from transcripts were sent for review to the respective informant.

Internal validity describes the credibility of the data and can be threatened by confounding variables. (Yin, 2009, p. 42-43; Kumar, 2005, p. 153-155). The tools to address internal validity issues lie in the conduction of the interviews and the analysis of the data. Internal validity can be established by logic according to Kumar (2005, p. 154). This means to justify interview questions by relating it to the objective of the study. The interview questions in this
The report was designed on three criteria. Firstly, the interview guide (second round) is based upon the goals of the white paper within maternity care (cf. Appendix V). By that it shall be ensured that the questions are relevant to the topic of the report. Secondly, the interview guide includes direct questions in order to find out if changes have happened and why they have happened the way they did. This is in accordance with objective of the study. Thirdly, background information about the municipalities was attained through the interviews as well. This was done in order to understand what starting point the municipalities have, and with that to be able to draw right conclusions. In addition, it can be argued that by asking the same questions to each interviewee, the information obtained can be validated, when the informants confirm the same information independently. By this, the report tried to ensure the internal validity of the obtained information. Furthermore, a well-established theoretical framework of organizational change is used to analyze the results.

External validity, also called generalizability, addresses the issue if the study’s findings are also applicable to other studies. This means, do the findings of this thesis also apply to other counties and municipalities in Norway. If a statistical generalization is followed, then external validity is not present in case studies. A case study does not selected units for analysis from a representative sample. This is not the aim of a case study. In case studies as well as qualitative studies we do not strive to generalize from a sample to the whole population. The nature of these kinds of studies is to investigate a phenomenon in a certain context, and then try to find the same results in a similar contexts (Yin, 2009).

Reliability implies that the study is recorded in a way that allows others to conduct the study again and arrive at the same findings (Yin, 2009, p. 45). Reliability can be influenced by the “ambiguity in the wording of questions, a change in the physical setting for data collection, a respondent’s mood when providing information, the nature of the interaction between interviewer and interviewee, and the regressive effect of an instrument” (Kumar, 2005, p. 159). These factors were taken into consideration during the conduction of the interviews. The interview guide provided a consistent tool in order to ensure that questions were asked in the same way. If an informant misinterpreted questions, additional follow-up questions were given to arrive to the sought information. The physical setting of the interviews was in each municipality the office of the informants. This provides the same setting for each interviewee and strengthens reliability. The mood of the respondent is an independent factor, which cannot be influenced easily. Nevertheless, there was an impression that all informants had a
positive attitude to the study during the interviews. Interaction and regressive affect issues were not found, when we compare the pilot interviews in two of the municipalities with the second round of interviews in the same municipalities. The responses, as far as asked before, were obtained repeatedly with the same attitude to the issues in question.

3. **THEORETICAL FRAMEWORK**

Organizational theory about changes in organizations is the bases for this report, and shall enrich and explain the results. In addition, it will be shown if the results can strengthen the theoretical framework. To be able to research how the three municipalities reacted to new policy guidelines within maternity care and the implementation of these through the Coordination Reform, we need to understand how organizations change and why.

3.1 **The Coordination Reform as planned organizational change**

Change in organizations can be characterized to be two different approaches, i.e. ways of action, to something at two different points in time. This can be a new approach but as well returning to old habits (Jacobsen and Thorsvik, 2007, p. 351). Further, organizational change can happen and influence various sections and task within an organization. According to Jacobsen and Thorsvik (2007, p. 351-352) these can contain:

   a) changes of tasks, technology, and goals and strategies;
   b) changes in organizational structure leading to changes in coordination and distribution of tasks;
   c) changes in organizational culture;
   d) changes in behavioral procedures within e.g. communication and decision making.

The Coordination Reform can be characterized as a *planned change*. The reform incorporates two of the areas of change defined above, i.e. area a) and b), and can therefore be characterized as an organizational change.

The reform is aiming at organizational changes in municipal health care services. This is because of the objective to change tasks, technology and goals, one of the areas of change. In municipal midwifery care, task shall be changed in a way that midwives shall incorporate
more duties than today, i.e. take a more central role in post-natal care. The white paper about maternity care states the following:

“The government intends a better organization of service and a better utilization of resources and personnel to provide comprehensive antenatal, birth and post-natal care. It is important that the entire service is seen in context to provide continuous patient care.” (St.meld. nr. 12, 2009, p. 8)

Technological changes shall happen by the introduction of the Norwegian Health Network. The intention is to enable public health centers to exchange electronic messages and information with general practitioners and hospitals. This shall improve the communication flow, create continuous maternity care and by that utilize midwifery resources in an efficient way. The quality guide for maternity care describes:

“The Coordination Reform will require the establishment of systems to ensure a mandatory interdisciplinary cooperation with good exchange of information. It is important to ensure the transition between local and specialist services. All participants must be connected to the Norwegian Health Network.” (Et trygt fødetilbud, 2010, p. 15)

A new goal and strategy of the government is to focus on the development of municipal health care services and with that to relieve the workload at the secondary health care level. Midwifery care is one of these services and shall therefore also take on a more central role as it is mentioned in the development strategy for midwifery services:

“The parliament generally wishes to reverse the trend of growth in specialist health care services. On this background, it is worth noting that municipal midwifery and maternity services for women and their families have insufficient capacity and availability. There is a need for service development and in that respect, the white paper introduced the concept of district midwives. A district midwife role, which can provide service on both levels, shall be assessed and developed as a seamless service offer. Continuity of care and seamless services are an important principle in the Coordination Reform.” (Utviklingsstrategi for jordmortjenesten, 2010, p. 48)

The Coordination Reform also attempts to change organizational structures in municipalities, i.e. the second area where organizational change can occur. In municipal midwifery care
change in organizational structure entails a new distribution and coordination of tasks. The aim is to utilize the competence of midwives more efficiently, as the white paper about the Coordination Reform states:

“To ensure good use of resources and continuity of patient care, midwives must be able to provide a service that utilizes their combined expertise.” (St.meld. nr. 47, 2009, p. 70)

Further, it can be argued that the reform is a planned change, because planned changes are led and controlled actively by leaders in an organization. This can also included reforms from policy makers (Jacobsen and Thorsvik, 2007, p. 360). The Coordination Reform is actively planned by the government to implement the changes explained above. The reform is a reaction to the coordination challenges and growth in secondary health care services and expanses. The government has recognized these challenges and has elaborated which measure it can counteract these. The result of these steps is the Coordination Reform. With this approach the government fulfills the rational criteria that lead to a planned change, according to Jacobsen and Thorsvik (2007, p. 360).

### 3.2 Success factors for organizational change

The question about if organizations change or not, implies in this study to find the answer to if the suggested changes within maternity care have been implemented within midwifery care services or not. A successful implementation of the contract within midwifery services and with that the suggestions from the policy guidelines require certain success criteria to be met.

![Success factors for organizational change](image)

Figure 3: Success factors for organizational change

Organizational change theory is vast and argues for different key factors that can influence a successful planned change. Even so, some points seem to repeatedly be mentioned by various authors, according to Fernandez and Rainey (2006). These determinants can influence the
outcome at different points in time, and they can have additive effects (Fernandez and Rainey, 2006). In the following, four of these determinants, which are relevant for this study, will be explained. These are a) conveying the need for change, b) develop accurate strategies for implementing change, c) support from top-management, and d) provision of necessary resources, as shown in Figure 3.

One of the requirements for a successful planed change according to Jacobsen and Thorsvik (2007, p. 374) is a notion in the organization that the change is necessary. Fernandez and Rainey (2006, p. 169) describe this as the necessity to persuade the organization that the change is needed. This entails that municipalities need to create a vision of future organization of midwifery care. The overall vision is already communicated by governmental guidelines. The task of the municipalities is now to incorporate this vision in local settings and to develop specific strategies to arrive at this vision (Fernandez and Rainey, 2006, p. 169).

A second requirement is the need of a strategy and plan on how the changes shall happen in order to achieve the goals. This plan has to show clarity and sound causal links between the changes and the anticipated effects (Fernandez and Rainey, 2006, p. 170). It has to be avoided to create plans and policies, which are general and ambiguous in order to prevent confusion and because of that wrong or just fragmentized implementation (Fernandez and Rainey, 2006, p. 170). Jacobsen and Thorsvik (2007, p. 374) add that it is important to clarify what shall be changed and what shall remain the same. By following these suggestions more accept for change can be created and with that a successful implementation supported.

Further, Fernandez and Rainey (2006, p. 171) explain that “top-management support and commitment play[s] and essential role in successful change in the public sector”. This support can come from single leaders or groups of leaders in key positions. The message here is that a certain number of people, preferably in important positions, need to support the initiative of change (Fernandez and Rainey, 2006, p. 171). In addition, a support group would have the power to override resistance to the change (Jacobsen and Thorsvik, 2007, p. 374).

Another criterion for successful change is the provision of resources to support the intended change. As Fernandez and Rainey (2006, p. 172) explain, changes imply the redirection of scares resources. When there is a lack of resources in a municipality to e.g. train employees
and develop new practices, then the change will only be implemented partly, if at all (Fernandez and Rainey, 2006, p. 172).

3.3 Reasons for resistance to organizational change

As explained above certain criteria need to be fulfilled for successful implementation of a reform. Consequently, if these criteria are not met, then implementation might fail or only be fragmentized. The question that arises is why organizations have to follow these criteria at all in order to succeed. The main obstacle is that changes can receive resistance. Resistance is human and can be an emotional reaction like fear and anxiety. However, resistance can also display simply the existence of different interests and with that rational actions in order to protect own interests (Jacobsen, 1998).

Jacobsen and Thorsvik (2007, p. 361-364) list several aspects. In the following, four factors, which are relevant for this study, will describe: a) loss of identity, b) double work in periods in connection with structural change, c) changes of power structure and d) the need for new investment, as shown in Figure 4.

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**Figure 4: Resistance determinates for organizational change**

Loss of identity can be one reason for resistance against change. It is argued that organizational culture gives employees a notion of affiliation to the organization. Further, it creates security by providing stable surroundings for employees with established work processes and task distribution. If reforms attempt to changes these secure and long established environments, employees or professional groups, can feel threatened and work against change (Jacobsen and Thorsvik, 2007; Jacobsen, 1998).

Another reason for resistance against organization change can be double work (Jacobsen & Thorsvik, 2007, p. 363). It is explained that organizational change demands additional resources because change bring additional tasks to already existing ones. Alternatively, old
and new tasks have to be preformed parallel in a period. The reform will receive resistance when one of these situations arises, since it is not apparent how double work shall improve work processes. It is then important to communicate that the need for additional input is only necessary for a certain period. Alternatively, if the additional input is of permanent character in the sense of additional tasks, it is important to ensure additional resources as well (Jacobsen and Thorsvik, 2007; Jacobsen, 1998).

With organizational change the power balance between employees, i.e. professions within the municipalities, can change. This can lead to that some parties will be less central in the information flow and that their influence may be diminished. It is therefore naturally that those parties whose power base is threatened will show resistance to suggested changes (Jacobsen and Thorsvik, 2007; Jacobsen, 1998).

The need for new investment can lead to rejection of new reforms. Investment can mean the procurement of new technology or equipment, as well as to acquire new knowledge in order to use the equipment. This is connected with financial consequences for an organization, since such investments can be seen as sunk costs. Municipalities will therefore not or only slowly expand equipment and competence. Another type of new investment is to invest in new profession to preform tasks. To try and change the need for a certain profession in an organization can lead to strong resistance from the party in question (Jacobsen and Thorsvik, 2007; Jacobsen, 1998).

### 3.4 Conflict groups as facilitator for change

Van de Ven and Poole (1995) have developed a framework of four basic theories for how and why organizations change on bases of an interdisciplinary literature review. One of their theories, which they call dialectical theory, implies that organizations consist of opposing interest groups.

![Figure 5: Professional conflict as conflict groups in dialectical theory](image)
These interest groups represent conflicting interests and constantly fight to gain influence and priority. Status quo is maintained by finding compromises in the continuous confrontations. Changes happen when one of the parties gains so much power and influence that it can change the status quo in the organization. This means that changes can be supported by the conflict between two parties in an organization (Figure 5) (van de Ven and Poole, 1995, p. 517).

3.5 Charismatic leadership as facilitator for change

Good leadership can also support changes. Nadler and Tushman (1990, p. 281) argue for that “a model has emerged from recent work aimed at identifying the nature and determinants of a particular type of leadership that successfully brings about changes […].” Charismatic leaders, as they call them, display three patterns of behavior (Figure 6).

![Figure 6: Charismatic leadership](image)

One characteristic is **envisioning**. This entails that the leader can demonstrate a clear vision to his employees about the changes to happen. Further, s/he shows a determination to achieve this vision by setting expectations to employees and by acting in accordance to the goal. A second trait is to be **energizing**. This entails to motivate employees, as well as to express confidence in the goals, the employees and one self. Motivation is also achieved by emphasizing smaller positive changes during the process of a reform. A last factor is to be **enabling** as a leader. This entails to listen to problems and challenges employees bring up during a process of change, and to give them support and show empathy for their problems. Further, charismatic leaders enable their employees to perform effectively in a change process by showing confidence in their abilities (Nadler and Thusman, 1990, p. 282). Therefore, it can be argued that changes also depend on what type of leader we find in the organization that is supposed to implement change.
3.6 Summary

In the analysis this framework with the four factor groups will be used to determine how municipalities have reacted to the Coordination Reform and the realization of new policy guidelines within maternity care. This will be done by firstly investigating if municipalities had an implementation at all. If an implementation occurred, the success of the implementation will be examined by the determinants. If no implementation occurred, the reason for this will be investigated. Figure 7 summarizes the four factor groups that can influence planned change. The figure shows visually that these factor groups with their determinants can effect the implementation of new policy guidelines through the contract within midwifery care in the Coordination Reform. The implementation entails the transfer of health care services from secondary to primary care level. Within maternity care this involves that municipal midwives on primary level shall take on a coordinating role in maternity care in order to ensure continuous follow-up of women during pregnancy and in the post-natal period. Specifically, this also requires that healthy women will be transferred back to their home municipality soon after birth to get post-natal follow-up by the midwife they consulted during pregnancy (St. meld. nr. 12, 2009).

![Figure 7: Summary of theoretical framework in connection with the structure of the implementation of new policy guidelines through the Coordination Reform](image-url)
4. RESULTS

The results in this report will be presented by, firstly, presenting some background information about each municipality. Thereafter, the results from the interviews in each municipality will be presented in three theme groups: cooperation between professions, capacity and competence development, and changes due to the Coordination Reform within midwifery care. These themes were selected from the interviews because of their relevance to the theoretical framework. The last section in this chapter summarizes the content of the contract within midwifery care in the three municipalities.

4.1 Municipalities

Table 1 summarizes background information about the three selected municipalities. The municipalities were given the names municipality A, B and C. Firstly, the municipalities represent the top municipalities in the county when it comes to size and the need criterion (cf. section 2.2). The environmental circumstances the municipalities operate in are very similar. In each municipality the midwifery service is organized within a public health center. This also entails, that midwives can have a close cooperation with public health nurses when necessary. The informants confirmed this and describe the cooperation between public health nurses and midwives as well working and efficient in all municipalities. The recruitment possibility of new midwives, if necessary, is not problematic in the three municipalities, according to the interviewees. Only one municipality offers accompaniment services. This service is not applicable in the other two municipalities because of the proximity to a hospital. The number of midwives employed and the employment percentage of these are similar in the three municipalities and above the national average of 60 percent. Table 1 shows which informants were interviewed in the municipalities. This is important to note in consideration to what answer leaders on different levels have given. The kind of tasks midwives preform today within maternity care in each municipality is shortly described. This information was important to obtain in order to establish an understanding of the current duties, and so to be able to compare them to the suggested new duties in the policy guidelines. These tasks and several other concepts within maternity care are described in more detail in Appendix IV in order to give the reader a better understanding of the results. At last, the table shows that no electronic exchange, i.e. through the introduction of the Norwegian Health Network as suggested in the quality guide for maternity care (cf. Et trygt fødetilbud, 2010), is established. This information is important as it can have influence on the way cooperation between the
different institutions and professions functions. However, all municipalities have initiated the process of installing the Norwegian Health Network.

**Table 1: Background information about municipalities**

<table>
<thead>
<tr>
<th>Statistics of municipalities in the county by the need criterion</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of women in age group 20-34 years living in the municipality (2008-2010)</td>
<td>2511</td>
<td>2301</td>
<td>996</td>
</tr>
<tr>
<td>Average number of livebirths in the municipality (2008-2010)</td>
<td>318</td>
<td>271</td>
<td>137</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwifery organized within public health center</td>
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<td>Accompaniment services</td>
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<tr>
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<tr>
<td>Midwife</td>
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<td>Leader of public health center</td>
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<tr>
<td>Antenatal check-ups</td>
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<td>yes</td>
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<tr>
<td>Post-natal home visits</td>
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<tr>
<td>Post-natal check-ups</td>
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<td>Group counseling courses</td>
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1) Source of data: Statistics Norway.
2) Details about the selection of the units for analysis can be found section 2.2.
3) Average employment percentage in Norway is 60 percent.
4) Not part of main tasks, but can occur in special cases were addition follow-up is need.
5) Counseling courses are being started up again shortly, after a period with capacity problems.
6) Implementation of Norwegian Health Network is planed, and partly initiated.
4.1.1 Cooperation

The degree of cooperation between professionals working within municipal maternity care is varying in the three municipalities.

The informants in municipality A describe the cooperation as sufficient and working well, but with need for improvements. Issues about better contact and the need for a formalized tasks distribution, are emphasized. The midwife mentions that it can occur that a doctor sometimes does not inform women that midwifery service is offered in the municipality as well. In such a case, women might not or only very late find out that they can take pregnancy check-ups at the midwife in addition.

Communication takes place by telephone or if the midwife seeks the GPs at their offices. The midwife points out that GPs often are very busy, which hinders effective communication. However, the information exchange is functioning in the end. The midwife expresses the wish of a better-formalized cooperation with GPs. The leader also expresses this wish. S/he desires a written statement about how the cooperation should be designed.

“I have an ambition that we might have something more written about how things should be. So we have a plan for maternity care, which must include collaboration with the GPs. That it is not just up to the individual [GP], that now we feel that it is appropriate to take contact, it is too vague in a way [today].” (Quote by leader)

The chief municipal medical officer was open for expansion of competence areas for midwives. However, such changes would have to be evaluated over time. S/he is of the opinion that such changes should be influenced by the need and demand by patients. According to the chief municipal medical officer, regular meetings between the two professions are not scheduled, but if issues have to be discussed then midwives are invited to the GP meetings. The chief municipal medical officer also states that it is possible to bring up issues, suggestions and ideas to him directly. S/he also mentions that in a recent meeting between the two professions, issues about ‘who does what and when’ were discussed, in addition to communication challenges. There have been different understandings in these areas, and the discussion between the two parties has been professional, according to his/her statements. The conclusions made in this meeting were not available to the researcher.
In municipality B the cooperation between the health professions is describe as difficult. From the interviews it became clear that the midwives / public health center and the chief municipal medical officer both wish to enhance and/or maintain their professional role within maternity care, which creates conflicts. According to the midwife, the challenges are based on the fact that there are many medical doctors the midwives have to relate to. Each of them works in a different way with different opinions on how things shall be done. The leader confirms this information. S/he points out that cooperation with GPs is essential but sometimes can be difficult.

The chief municipal medical officer in municipality B confirms that the cooperation between GPs and midwives is tense, and that conflicting point of views make cooperation difficult. Further, s/he explains that the more parties are involved in pregnancy check-ups, the more like it is that something, medical complications for example, will be missed and overlooked since none of the parties has a good overview of the woman’s condition. Through this statement the chief municipal medical officer acknowledges the need for cooperation. However, it also gives the notion of professional conflict, in the sense of favoring only one party involved in maternity care.

There are no regular meetings between the two professions in municipality B. The leader expresses a wish for an improved cooperation with GPs. S/he mentions regular meetings as a tool, e.g. that midwives are allowed to participate 10 minutes in the regular meeting GPs have among each other. Furthermore, the leader points out that the health card for pregnant women is old fashioned, and that it is not the right tool for an adequate communication since it can be filled out very individually. It is up the each health care worker how much information s/he adds. The leader summarizes that basically a good dialog between the professions is needed. How much such a dialog is wished from the side of the medical doctors is not apparent from the interview with the chief municipal medical officer. However, there seem to be some underlying prejudices in both parties, which might prevent the start of a dialog.

Informal meetings between midwives in the hospital and the midwives working in the municipality are arranged. The cooperation between the hospital and the municipality works well, according to all informants. The chief municipal medical officer as well as the informants at the public health center confirms that the cooperation to doctors and midwives
at the hospital is effective and pleasant. This strengthens the finding that the major source of conflict exists on primary level, i.e. in municipality B.

In municipality C the informants characterize the cooperation as professional and well functioning. However, it is mentioned that coordination and professional knowledge exchange can be improved. The chief municipal medical officer points out that the GPs in the municipality are more concerned with following national clinical guidelines for antenatal care than midwives do, when it comes to the number of check-ups for women with uncomplicated pregnancy. The chief municipal medical officer reasons that this is because GPs and midwives have a different approach to pregnancy consultations. S/he explains that GPs have a more medical perspective, whereas midwives have a more relational perspective. Because of this, it can happen that midwives offer more appointments to women, then suggested in the national clinical guidelines for antenatal care. The midwife mentions that through an evaluation form, which she distributes to expecting mothers in her care, it was shown that pregnant women experience midwives to have better time, and it is easier to get an appointment at the midwife. All in all, the users are, nevertheless, satisfied with both service offers in the municipality according to this evaluation the midwife performs. When it comes to cooperation with the medical doctors, the midwife points out that there is actually no direct cooperation with GPs, since the two professions do not have regular meetings. Cooperation happens through the patient himself, through the health card for pregnant women, or by occasional meetings in special cases.

“We don’t have cooperation in a sense. We don’t have regular meetings and such things with the doctors. We don’t have that. However, I think that it [i.e. the cooperation] works well.” (Quote from midwife)

Another challenge mentioned by the informants in municipality C is that the coordination of appointments is not always functioning well. For example, the women can have an appointment at the GP and some days later at the midwife, as the chief medical officer explains.

These statements lead to the result that even though the two professions in municipality C show respect for each other, the underlying dispute about how maternity care shall be preformed on primary level still exists.
4.1.2 Capacity and competence

Two of the three municipalities, A and C, have not taken any step so far to expand the capacity and competence in the public health center within midwifery care.

The informants in municipality A state that capacity is sufficient considering the workload in the municipality. Even so, it is emphasized that additional employment is necessary if the public health center shall take over additional tasks. The leader acknowledges that the number of midwives employed in the municipality has to be reevaluated over time. However, it is difficult to increase employment in the municipality because of economical considerations. Furthermore, s/he explains that post-natal home visits preformed by midwives are not planed, and that the municipality does not have the necessary midwifery resources to offer this in the future either.

When it comes to expending public health centers with equipment and competence the leader explains that if women are send home earlier from hospitals, then the public health center has to have more capacity. However, she also states some reservations for such plans:

“Clearly, then one has to do that [i.e. develop public health centers]. I think probably we have reached a pain threshold in terms of following up new parents. It is not easy to go home alone with a newborn, even though they see the public health nurse comes everyday, it’s not the same as having someone around you [i.e. like in the hospital]. So if the thought is to send them home earlier, then there is really a need for extra time [i.e. capacity] and we don’t have that as of today. [...] I think it will be very difficult to give a good care, if the length of hospital stay will go down even more. Then I must say that many more resources have to be transferred to the municipality.” (Quote from leader)

The chief municipal medical officer explains that midwifery service is little service offered in the municipality, but their competence is important and can complement the competence of medical doctors.

In municipality C, the midwife explains that the workload is acceptable if their tasks shall only include antenatal check-ups. However, s/he emphasizes that municipal midwifery service has to be strengthened if several new tasks shall be appointed to midwives. The competence of midwives could be used more effectively, and they could relieve the workload for both
general practitioners and public health nurses. The midwife expressed wishes about being appointed various tasks by the municipality. Midwives have professional competence for helping and counseling women not only during pregnancy, but also post-natal. In addition, s/he points out that the midwife could supplement public health nurses in the future. S/he could take a post-natal home visit in the first week after the women travel home from the hospital. They can take e.g. blood tests, if the necessary equipment is available in the municipality.

“I believe that midwives can contribute more in post-natal care. I think that can be very important, because it is us who have the expertise exactly around pregnancy, birth and postnatal.” (Quote from midwife)

The leader in the municipality expressed openness to these issues, whereas the chief municipal medical officer is more reserved. The leader acknowledges that the midwives' position percentage has to be reevaluated in accordance to the workload. S/he also specifies that this might be necessary for public health nurses as well. The chief municipal medical officer describes the capacity within maternity care services performed by midwives and GPs together as sufficient. S/he does not see any need to expand midwife positions, but rather other professions.

“And the way I see it, we have sufficient coverage in midwifery. So I see no need for us to build out existing positions. There are some other groups that this rather applies to.” (Quote from chief municipal medical officer)

Relative to competence, the midwife keeps herself updated with professional information by attending courses, having regular meetings with other midwives and meetings with the hospitals within the region. The midwife states that she is the initiative taker in most cases, when it comes to attending courses. Course fees are an important factor when it comes to being able to attend or not. The leader confirmed this. S/he explains that the municipality tries to accommodate the wishes of the midwife when it comes to attendance of courses.

When it comes to expansion of competence, e.g. by taking blood tests, which have to be taken of newborns, the midwife confirms that they are trained to do that. They could take over such tasks in the post-natal follow-up period. At the moment the midwives are lacking the equipment for this. The chief municipal medical officer means, in contradiction to the
midwife, that midwives do not have the practice to take blood tests of newborns. The chief municipal medical officer elaborates further that if the municipalities shall take over such standardized procedures, then it has to be discussed what the best organization form for these new tasks would be. S/he points out that it can be of current interest to delegate these tasks to the public health centers, even though s/he also doubts if such an expansion is necessary with a low number of births in the municipality C.

The need for development and capacity expansion is not evident for C municipality at this point in time, according to the leader. The leader gave though the overall impression thought that they are open for changes if necessary in their opinion, like development of midwifery services and additional equipment. However, it would have to happen in connection with the development of other services in the municipality, which are submerging because of the Coordination Reform.

Municipality B has come furthest in the enhancement of capacity and professional competence at the public health center. Even though economical means are scares and no major changes have occurred yet, the public health center in the municipality is actively working with a project to start developing the center in accordance to policy suggestions. The public health center has on own initiative applied for additional funds and is starting up a project that shall strengthen midwives role in post-natal care, and also strengthen capacity in the public health center.

The midwife describes that if new task will be appointed to midwifery service in the municipality due to the Coordination Reform, then there is a need to expand the service.

“There is certainly a need to extend the employment positions [within midwifery], if we are to have the opportunity and capacity for everything [i.e. tasks] that are required of us, when more and more of the Coordination Reform is implemented. [...] At times we have quite a work overload already, to put it that way.” (Quote from midwife)

The leader points out that increasing the employment position of midwives can take years without tied grants. The employment capacity today is not sufficient, unless the midwives are only working with antenatal check-ups. The leader is stressing that they do not have the resources today to be able to offer more post-natal care services.
Municipality B has been granted some of the project financing they applied for. However, the additional funds are very limited and an expansion of midwifery resources is therefore not possible, despite project plans. Measures about procurement of additional equipment to the public health center have not been prioritized so far. The leader explains that the center does not have the competence to take over all the post-natal care, like for example examination of newborns by pediatricians. If that is required then the public health center has to develop into a bigger entity, according to the leader.

Competence development works mainly on the initiative of the midwives also in this municipality. The midwives participate in regular courses, as far as the municipal economy is allowing that. However, the midwife also mentions that she has to prioritize between courses and here task, i.e. to offer pregnancy checkups.

“Also I would like to participate in lots of courses, but then I cannot do my job here in a way. So I must prioritize the most important [tasks], but we certainly get the time to keep us updated [through courses].” (Quote from midwife)

Nevertheless, the midwife reports that are planning to attend courses to train themselves within contraceptive methods in order to be able to give mothers complete post-natal check-ups. The public health center has also included midwives, in addition to public health nurses, in training about guidance within breastfeeding. This measure shall on the long run also make midwives more able to take a bigger role in post-natal care.

The chief municipal medical officer describes the overall capacity and quality within maternity care as good. It is not apparent if s/he is informed about the project the public health center has initiated. The chief municipal medical officer explains that the re-accreditation program GPs have to go through regularly gives medical doctors knowledge within maternity care but also other health problems. Pregnant women benefit from this overall competence and therefore receive a qualitative good and complete follow-up during pregnancy.

The results in these municipalities show that any types of resource expansion, whether in form of new equipment, additional duties to midwives, or higher employment percentage for midwives, receive various reactions. Midwives naturally welcome such changes. Leaders are more reserved and bound by economical barriers. Medical doctors show both reservation and
support. Through the interviews it got apparent that doctors support more midwifery resource in post-natal care, a field, which is not intensively carried out by GPs. On the other hand, they show more reservation to midwifery care within antenatal care, a field the doctors are most involved in.

4.1.3 Changes due to the Coordination Reform

No changes seem to have happened in the municipalities due to the Coordination Reform. The role of municipal midwives has not been changed so far, according to the informants. Changes and programs within midwifery care, which are initiated on own premises by the municipalities seems to be more prioritized than change in connection to new policy guidelines within maternity care.

In municipality A, the midwife reports that she has not experienced any changes in her work. S/he also states that there is insecurity about what changes the Coordination Reform will bring and if the municipality will get any additional resources.

The leader states as well that there have been no changes since and because of the introduction of the Coordination Reform. Furthermore, s/he explains that the municipality is concentrating on expanding the usage of midwifery services in general, and therefore there is little focus on professional development. A project in cooperation with the local hospital on common pregnancy counseling courses has been initiated some time ago, but did not receive financial support so far, in addition to capacity challenges on both levels.

According to the chief municipal medical officer, there have not been so many changes yet, but many committees have been formed within various health fields and plans have been made. However, s/he also shows worry about that the process has been too fast, even though the Coordination Reform has good intentions. The focus is much on economical incentives, and the chief municipal medical officer wishes more focus on patients and not professions. Maternity care has not been discusses yet too much, and the chief municipal medical officer states that he has not got a good overview of midwifery services at this point in time.

Municipality B is the one municipality, which has acted most in accordance to the policy suggestions of the government, even though no major changes have happened so far. As a
reason the midwife suggests that the municipality on a superior level has prioritized other areas in the Coordination Reform.

“But so far there has been very little [change] from the top [administration] that is above my leader again. It seems like we [i.e. the municipality] have prioritized nursing homes and alike in the municipality. We [i.e. the midwives] are a little in the background.” (Quote from midwife)

The leader confirms this. Preventive care services have to wait another 3-5 years in order to be upgraded, according to the signals the leader got from the municipality.

According to the chief municipal medical, the Coordination Reform has no influences on maternity care and midwifery services in the municipality. The reform has effect on other areas in municipal health care services.

The leader states that there have been no additional resources to the public health center in connection with the Coordination Reform. However, extra resources were granted in connection to a project called “pregnant women at work” (cf. Appendix IV), which is though not connected to the Coordination Reform. Moreover, they work on a more continuous care service for pregnant women with mental problems, but this work has started already several years ago. The leader explains that this can be seen in connection to the Coordination Reform, but that it did not come because of it.

However, as shown above, a project is introduced in order to utilize midwives combined expertise. In general, the midwife states that she wishes to be used more effectively in all the areas of her expertise. S/he explains that it is important that they are allowed to take a bigger role in post-natal care.

“And that we will get more out [i.e. post-natal home visits], have more contact after the birth, because now it is a very unnatural cut. When I have had the last check-ups before birth, in some cases I might not see them again [i.e. the women] before half a year later when we meet by accident in the hall [i.e. at the public health center]. So that about to get a better system, to have at least one check-up after birth, to be able to complete [the follow-up], to get feedback, to see if I could have done things differently, if they want things to be done differently.” (Quote by midwife)
The chief municipal medical officer describes that many processes in maternity care services work well. However, s/he emphasizes that post-natal services should not be discontinued in hospitals, and that it could lead to quality losses if all responsibilities within post-natal care are transferred to the municipalities. If such a transfer shall happen, then major restructuring both within capacity and professional competence has to happen.

In municipality C, the role of municipal midwives has not been changed. The midwife confirms this, and explains that in her opinion changes will only happen if she suggests them. After having attended an information meeting about the Coordination Reform s/he got the following impression:

“Then I understood that this [i.e. the Coordination Reform] is not applicable for us at the public health center yet.” (Quote from midwife)

The leader is questioning the effect of the Coordination Reform on municipal midwifery service and said that the contract within midwifery care is unnecessary, at least in municipality C. This is because the points describe in the contract are in place already today.

The chief municipal medical officer in the municipality expressed that there is no restructuring planed of the municipal midwifery service. As reasons he mentioned the relative proximity to two hospitals, a sufficient coverage of the demand of maternity care, and that other patients groups need more attention within the Coordination Reform.

“With regard to this area, pregnancy and birth, we don’t feel affected in any way. [...] The Coordination Reform in this area is quite irrelevant for us.”
(Quote from chief municipal medical officer)

The midwife’s input and the acceptance of her ideas at superior levels are essential for any development, according to the midwife. The leader named that midwifery services are developed on own premises, and that other areas in the Coordination Reform are prioritized. The leader expressed that the municipality is already developing midwifery services, independent from the Coordination Reform. The informant mentions the increased midwife employment to 100 percent by the program “pregnant women at work”, and a close cooperation of midwives and public health nurses with mental health services. In addition, the
leader was open for changes in midwifery services, e.g. to give midwives more responsibilities within post-natal home visits.

The chief municipal medical officer explains that municipality C has sufficient capacity to offer midwifery services to all pregnant women who wish to have consultations by midwives. Therefore, s/he expressed reservation for expansion. In his/her opinion, there is no need to expend the maternity care on a professional basis.

The results show that midwifery care is being developed in municipalities, but mostly on own premises and not as a result of national recommendations. Midwives like to see the Coordination Reform as an opportunity to improve midwifery care. Two of three chief municipal medical officers state that the Coordination Reform has no effect on maternity care at all, and dismiss the reform as not relevant for maternity care. Leaders work within the economical boundaries they are given, and therefore their support for the stated changes is not evidence in the first place and at this point in time. Nevertheless, leaders seem to be generally open for changes, which is positive for future development.

4.2 Contract

In the county chosen in this study the contract within midwifery care has been negotiated between a negotiation group, which represented the municipalities and was acting on behalf of them, and the health trust. The negotiation group had representatives from several municipalities and the health trust (Hals, 2012). The Norwegian Association of Local and Regional Authorities (KS) has been highly involved in the process and was acting as a coordinator and initiator in the whole process.

During the process of this thesis it became clear that the contract within municipal midwifery services, as all the other contracts as well, was the same for all the municipalities in the county. After negotiations, a draft of the contract was sent to the local council in each municipality to be voted on.

The contract is broadly formulated and includes the overall responsibilities of the municipality and the health trust. It states that the white paper about maternity care (St.meld. nr. 12, 2009) and the quality guide for maternity care (Et trygt fødetilbud, 2009) are the bases for the contract. The goal of the contract is to clarify the task distribution between the parties.
Details of the tasks for each party are listed. These tasks mainly represent today’s working procedures and correspond with the descriptions of the informants. In the contract it is mentioned that a networking group with representatives from the health trust and the municipalities shall be established to work on suggestions on how to implement the policy guidelines from the quality guide for maternity care. The deadline for this work is set to February 1st, 2013. Further, it is emphasized that new guidelines for post-natal care will be announced nationally in autumn 2012. Therefore, issues in post-natal care will be considered at the revision of the contract in January 2013. Cooperation arenas are mentioned in the contract and represent the existing procedures and correspond to the information obtained from the informants. Electronic information exchanges, i.e. the Norwegian Health Network, shall be used after distribution to the municipalities has happened, according to the contract.

The result of this review of the contract is that, so far, it has been formulated general and with little specific measures in accordance with the policy guidelines. The work with this bit of the contract is in progress, and revisions of the contract are to be expected in the following year.
5. **Analysis**

None of the municipalities in this study seems to have had major changes within maternity care in connection to the Coordination Reform. The municipalities seem to develop midwifery care, however, not in connection to the new national guidelines. This finding of no or partial implementation can be analyzed by determinants for resistance to change, which has been found in all three municipalities. It was found that municipality B has though established plans for implementing some of the suggested policy guidelines. This shall be analyzed by determinants for successful planned change. Further, the role of the contract about midwifery services that shall facilitate the suggested changes within midwifery care will be investigated. Last, it will be explored why one of the municipalities, despite resistance and seemingly strong professional conflict, has come furthest in the process of implementation.

5.1 **Resistance**

Through the results the notion of resistance from doctors emerged. This resistance can be explained by two determinants: firstly, the loss of identity, and secondly, the shift of power. Historically, general practitioners have performed local maternity care. Doctors had an established position in maternity care as the only profession preforming antenatal check-ups. If a reform tries to change this established environment, it will receive resistance. This was already the case in the mid 90s when municipal midwifery care became mandatory. One of the midwives in the study confirms this by stating that she received resistance when her position as a midwife was established in the municipality. The Coordination Reform is now taking a step further by suggesting to give midwives a more central and coordinating role in maternity care, and specifically within post-natal care. Such a change can seem to threaten the stable professional environment for doctors, and with that their identity and role within maternity care. One chief municipal medical officer states that for many women, general practitioners represent the basic contact person during pregnancy, since GPs have an established relationship to their patients. This is because GPs are often a type of family doctor, who follows their patients through a lifetime. Therefore, it can seem that GPs understand it as a threat that this established contact and their overview of their patients health status could be disconnected within maternity care.

Secondly, the power balance between professions can change. This can lead to that one party will be less central in the information flow and that their influence may be diminishing. This
can naturally concern GPs in the municipalities, which explains their resistance. With the midwife taking over a more coordinating role in local maternity care, doctors might fear to lose their position and access to information about their patients.

The statements from two chief municipal medical officers strengthen these arguments. One of them is explaining that midwifery service is seen as a supplementary offer in the municipality. This statement shows the doctors’ view on the position of midwives in local maternity care. Another chief municipal medical officer expresses that there is no need to expend maternity care on a professional basis. He questions the need and the usefulness of such a change.

“As a general solution, that midwives should take over more of antenatal care, if I should say yes to that, then I will first ask for evidence that this is useful.”

(Quote from chief municipal medical officer)

Also in this comment, some resistance to change is articulated. Therefore, it is important to note that the policy guidelines do not suggest that midwives shall take over all maternity care in municipality. The white paper emphasizes that cooperation between all professions is needed and aimed at:

“Municipalities should ensure that the local midwife may have a central role in the antenatal and post-natal care in collaboration with health trusts, public health centers and general practitioners.” (St.meld. nr. 47, 2009, p. 71)

Resistance can also be based in the fact that double work will occur in a period or that tasks might be expanded. The latter is the case in the policy suggestions for municipal midwifery care. Midwives shall get involved in post-natal care. These duties will come in addition to their existing tasks. Hospitals are suggested to send home healthy mothers and their newborns to local midwifery care when possible. Based on the information obtained from the informants, no hospital seems to have forecasted to the municipalities that they have any plans to do this, so that the municipality can take over post-natal care. Therefore, it can be seen as double work that both hospitals and municipalities shall preform post-natal care. In connection to this topic, a chief municipal medical officer argues for that post-natal services should not be discontinued in hospitals, and that it could lead to quality losses if all responsibility within post-natal care is transferred to the municipalities.
If such a transfer shall happen, then major restructuring both within capacity and professional competence has to happen, in his/her opinion. Also other informants agree with this. Such a restructuring entails major changes, in particular the provision of new services, competence and equipment like at hospitals. In the light of the theory, it is therefore logical that the informants show concerns about that post-natal care shall be transferred to primary care level, as they might see at as unnecessary.

A final reason for resistance can be the need for new investment. New investment can be understood in two ways. Firstly, it can simply mean the acquisition of new equipment. Midwives in all municipalities have pointed out that they can take blood tests of newborns in connection with post-natal follow up. However, public health centers lack the equipment for this. All leaders in the study have expressed that these topics have not been discussed, and no plans are made about expanding equipment. Procuring such equipment means sunk cost for the municipality. Therefore, municipalities will not expand equipment and competence, or only gradually or in connection with other expansion. The leaders have expressed openness for development of services and equipment. However, as one of them has pointed out, it would have to happen in connection with the development of other services in the municipality, which are submerging because of the Coordination Reform. Secondly, new investment can mean the use of additional midwifery resources. To expand competence and capacity within midwifery, can be seen as new investment municipalities have to make in order to be able to cater for new tasks. Several informants confirm this:

“To, if they [i.e. the midwives] are only to do that what they do now, that is to have consultations [i.e. antenatal check-ups], and not having post-natal check-ups, not offering pregnancy counseling courses, not paying particular attention to refugee women for example, or to immigrant women where we see there is a need, then we have enough [resources]. But it is about what one should offer, what definition of the tasks one should have.” (Quote from leader)

Municipality A has had some capacity challenges within midwifery services in the past year, but has now two midwives employed. The public health center is now working with increasing midwifery services, and to offer antenatal follow-up to all pregnant women who wish so, according to the leader. This was not the case so far. Their aim is to increase the coverage of midwifery care amongst expecting mothers, i.e. that more women shall use their services again. This means that municipality A is concentrating on expanding the usage of
Municipality C does not seem to have taken steps to expand the capacity and competence in the public health center so far, with exception of the program “pregnant women at work”. A capacity expansion is not evident for the municipality at this point in time, according to the leader, because the municipality is offering adequate midwifery services, has sufficient capacity, and is developing services on own premises. The development initiatives of the municipality as the leader has listed them seem to be relevant, however, not in connection with the new policy guidelines about restructuring midwifery services. Capacity might be sufficient in municipality C, as the leader states. However, the midwife points out that:

“There are a lot of tasks a midwife can work within a municipality. [...] I’m only working with the important things [i.e. antenatal check-ups], but that there should be more midwives in the municipality, that is for sure, yes.” (Quote from midwife)

In municipality B no new investments have been prioritized from top administrational level. However, the public health center in the municipality has found their own way to address the issue, as it will be shown in the following section.

5.2 Success factors

These resistance determinants have shown why all municipalities receive opposition to implementation of change. Either through professional conflicts or resource related issues. However, we have seen through the results that municipality B, despite these obstacles, has come furthest in implementing new policy guidelines. The question is what did municipality B do differently, despite equal resistance. This will be analyzed by examining if B has followed some of the criteria for successful implantation for change, which the other two municipalities did not, in order to explain their partial success.

In the first criterion it is explained that a municipality has to have the understanding that it is necessary to reorganize midwifery care services. This does not seem to be the case in municipality C, and neither in municipality A, as it was shown in the results. In municipality B the leader of the public health station seems to have an understanding of the new policy suggestions and wishes to start implementation. However, they did not get any signals or
incentives to do so from the central administration. It got apparent from the interviews in municipality B that the leader has communicated a vision of future midwifery care to the midwives, and generally informed them about the new policy guidelines. The midwife pointed out as well that the leader initiated the process. Therefore, is it is possible to argue that municipality B fulfills one of the criteria for successful implementation, even though on a lower managerial level.

The second determinant states that this vision has to be presented in accurate plans and strategies. Municipality B has made a project plan about how to encounter the realization of policy guidelines. The public health center has on own initiative applied for additional funds with this project plan, and is hoping to be able to start up with measures to strengthen midwives’ role in post-natal care, and also strengthen capacity in the center generally.

“We thought because of the Coordination Reform we need to strengthen care services, both public health nurses and midwives.” (Quote from midwife)

The public health center is planning to expand the responsibilities of midwives. Midwives shall be more included in post-natal care, i.e. home visits, check-ups and breastfeeding counseling. Municipality B has been granted some of the financing they applied for. On the bases of this information it is possible to reason that the municipality has made an attempt to provide a plan and strategy for the implementation of new policies. With no insight in this project plan, it is tough not possible to assess how accurate and clear the plans are in order to create accept for change and with that a successful implementation. The interviewed leaders in municipality A and C have confirmed that no plans for future changes in the direction of the new policy guidelines are made.

On a higher administrative level, the contract within midwifery care can be seen as part of the national strategy for improving maternity care and a measure to implement new policy guidelines. Therefore, the criterion to create accurate and well-defined strategies can be applied for the contract as well. As shown in the results the contract is formulated general, and does not represent any changes or new tasks for the municipalities as for now. The work with the implementation of policy guidelines through the contract is in process at the point of the study. Suggestions concerning this issue will be included in the contract earliest in the renegotiation of the contract in 2013. Therefore, at this point in time, the municipalities can
choose freely whether they wish to implement suggested policy guidelines already now. On this background, it is understandable that municipality A and C have not had any incentive to implement changes, since the contract is general. As the theory suggests a general plan can lead to no or only fragmentized implementation of change. In this case, it can be argued that two municipalities chose no implementation because of this. The leader of the public health center in municipality B was not even aware of the negotiated contract, as it became clear in the interview. This might be an addition explanation for why the leader of the public health center chose to make an own plan.

As it was pointed at before, additional duties for midwives raise the need for additional resources. This leads to another criterion for successful implementation of planned change, i.e. the provision of necessary resources. The municipalities do not get any additional resources to take in mothers who have just given birth and offer them adequate post-natal care. Therefore, when these resources are not available, leaders in the municipality will not prioritize new policy guidelines:

“It is clear that if it had come money on the table, and it shall be used on midwifery services, it is clear then we had spent on it [i.e. midwifery care]. And maybe came up with even more [actions]. But I think we're good enough to keep up with the developments happing now.” (Quote from leader)

It was found that municipality B has received additional funds in connection to their project application. These funds are tough very limited and a relevant expansion of midwifery resources is therefore still not fully possible, according to the leader:

“Also, we think that we want [to offer] more home visits together with the midwife, or only by the midwife. But we actually don’t have the resources for that today.” (Quote from leader)

The quote above shows that funding is essential when implementing new reforms. This is not given for either of the municipalities. Even so, it can be pointed out that municipality B, since it applied for additional funds, had the chance to start up implementation.

The last criterion for successful implementation of change is the support from top-management. In neither of the municipality this is evident. According to the signals the leader
of the public health center got from the top administration in the municipality, preventive care services have to wait another 3-5 years in order to be upgraded:

“What we experience with the Coordination Reform is that it is nursing and care services where they have to shoot in a lot of money [...]. And so we see that preventive care comes later. That this reform is a direction reform, so maybe in 3-5 years, we can begin to claim or think that now we have to build up [preventive care].” (Quote from leader)

The leader in municipality C is questioning the effect of the Coordination Reform on municipal midwifery service and said:

“Relative to midwifery service, I actually think that there won’t be any big changes. [...] I think very much is in place already. [...] I don’t see any big challenges for us relative to the [midwifery] services we already perform today.” (Quote from leader)

Further, the chief municipal medical officer in municipality C expressed that the goal about “continuous maternity care” which is stated in the policy guidelines, is not a real goal. This statement shows currently no support for the planed changes.

In municipality A, the leader expressed some reservations for the plans within maternity care, arguing for that a certain amount of days after birth women receive best care in hospitals. This meaning that post-natal care shall not be completely, i.e. in all its aspects, transferred to municipalities, in her opinion.

These result show that there is no overall support for new policy suggestions on administrational level. The leader of the public health station in municipality B supports the plans, whereas the one in A is more reserved in accordance with the top administration. Municipality C shows also more reservation, even though the notion of openness for changes seems to be apparent. Therefore, is can be argued that neither of the municipality has achieve to mobilize a mass of people in important position supporting the implementation, so the criterion is not met.

In summary, it is shown that municipality B fulfills two out the four determinants, which can lead to successful implementation of change. Therefore, it makes sense that municipality B
has come furthest, even thought they are still at the beginning of the process to realize new policy guidelines within midwifery care. Municipalities C and A match none of the criteria so far.

5.3 Conflict groups

During the interviews with the informants in municipality B it became clear that the conflict between professions, i.e. midwives and doctors, seems to be strongest in this municipality. The midwife expressed frustration about the lack of communication and partial unwillingness of cooperation between the two professional groups. The chief municipal medical officer states that a conflict of interest exists and that midwives are strongly fighting their corner, which makes cooperation difficult. The leader points out that cooperation with GPs is essential but sometimes can be difficult:

"We are dependent on collaboration with the doctors, and we try to get through, but it is very dependent on the individual." (Quote from leader)

How can this be consistent with the fact that B has come furthest in the implementation of changes? As it is explained in the theoretical framework, conflicting groups in an organization can boost change. GPs and midwives can keep the status quo in the municipality by finding compromises every time a confrontation arises. If one party though gains additional power then change can be enhanced. In municipality B, it can be argued that the underlying strong opposition between the midwives and GPs is fostering change. The public health station might see the introduction of new policy guidelines as a way to emphasize their point of view and maybe facilitate a change in their interest.

This argument is not applicable in municipality C or A. In these municipalities the conflicting interests between the professions seem to be handled by discussions. Both municipalities have for example pointed out that a meeting has been held between GPs and midwives to discuss issues within maternity care. These meetings have taken place after the interviews have been conducted, and the result is not available to the researcher. In addition, observation during the interviews confirm that the two professional interviewees in municipality C have great respect for each other. In municipality A, the conflict level seems to have been a bit stronger, however, the two parties seems to have communicated and discusses the problems in the recent meeting. The more positive approach of the chief municipal medical officer to changes within maternity care might have supported this open discussion in municipality A.
5.4 Leadership

Another condition presented in the theoretical framework, which seems to be more apparent in municipality B than the other two municipalities, is that one for charismatic leadership. The theoretical framework stated three traits a leader should display in order to support change; to be envisioning, energizing and enabling. The leader in municipality B seems to be closest these traits. As explained previously, the initiative for creating a project for strengthening midwifery care and the public health station came for the leader at the public health center. S/he communicated a vision about the changes to happen to his/her employees. The leader also motivated employees and shows own motivation for the changes. To the question if the Coordination Reform will have more effect in the future, the leader answers:

“Yes, it must have, at least with these expectations [i.e. from the white papers]. Then it must have [changes]. But if it is up to each municipality how much it [i.e. midwifery services] should be strengthened, then it becomes a battle.”

(Quote from leader)

Further, s/he shows confidence in the abilities of employees and helps to enhance their competence. The public health center in municipality B has for example included midwives, in addition to public health nurses, in training about guidance within breastfeeding. This measure shall on the long run also make midwives more able to take a bigger role in post-natal care.

This inclusion and the possibility to participate in courses and further education seems to exist in the other two municipalities, as well. The midwives in municipality A and C explain that their municipality tries to accommodate the wishes of the midwives when it comes to attendance of courses. It has to be pointed out, that the leaders in these two municipalities might have the three traits mention above as well. However, the results show that they have not actively used them in order to enhance the realization of the new policy guidelines within local midwifery care.

5.5 Limitations of the study

The possible sources for errors and limitations in this study can be summarized in the following five points:
**Need criterion:** In the case-selection of this study the assumption was made that those municipalities, which have the highest need for maternity care, are those, which will show results and changes. Alternatively, it can be assumed that municipalities with low birth numbers show results as well, since these municipalities have to have a more creative and solution oriented approach to task within maternity care. For example it can be argued that midwives in municipalities with low birthrates, have already initially a more central role in maternity care because of the lack of access to other maternity facilities. This is because low birth rate here is assumed to be connected to a low population level as well, which again leads to reduce medical facilities. Nevertheless, the selection of municipalities with high birth rates, is still assumed to be reasonable. The argument cited here can be seen as an invitation for other researchers to explore municipal midwifery services in little populated municipalities.

**Informants:** As mentioned in section 2.3.1, those informants, who had leader positions, were not all from the same leader level. This is due to organizational differences in the municipalities, as well as access to informants. It can be argued that this can lead to discrepancies in the interview answers due to different access to information for the leaders. On the contrary, it is also reasonable to assume that midwives and their leaders will be involved in any planed changes. In addition, the doctor’s viewpoint on municipal midwifery care was only obtained from chief municipal medical officers. The reason to select this informant group was due to convenience and to avoid selection bias through snowball sampling. A disadvantage of this selection is that some of the chief municipal medical officers were not a good source of information. This is because some have not had a practice since several years and it sometimes appeared that they were not updated on maternity care issues. On the other hand, the chief municipal medical officer is the head of all the GPs in the municipalities and gets status reports from them.

**Transcription:** The interviews were transcribed word by word, but without including emotional or verbal expressions. This decision was made on the supposition that the answers given by the informants were significant by them selves.

**Timeframe of study:** This study is conducted in the year of the introduction of the Coordination Reform. Because of this, the effects of the Coordination Reform may not be apparent yet. On the other hand, it can be argued that if municipalities had an intention and plans within the development of maternity care, then this could be detected already at this point in time. Still
the argument that this study can be conducted too early to capture the effects or intentions, is valid.

*Bias:* “…is the deliberate attempt either to hide what you have found in your study, or to highlight something disproportionately to its true existence” (Kumar, 2005, p. 214). Particular attention has been given to avoiding bias as defined above. No relevant data was excluded from the study and the opinions and views of the different informants and informant groups were acknowledged and illustrated in the study. In addition, the study is not supported financially or in any other way by unions and other institutions.

*Accompaniment services:* The selected municipalities were all in quite central areas, which makes an important part of the contract within midwifery services irrelevant for the study, i.e. the agreements on accompaniment services.
6. CONCLUDING REMARKS

This report has given an insight into how three municipalities in one county in Norway are reacting to new policies suggestions within local maternity care, and the legislation of these through one of the contracts within the Coordination Reform. Through in-depth interviews it was possible to get an understanding of challenges, point of views and future plans of the interviewees within local maternity care. Further, it was shown that theories within organizational change have been confirmed by the results in these three municipalities.

Professional conflict seems to play a two-folded role when it comes to successful implementation of planned change. It can lead to resistance against change but also foster change.

The suggested policy guidelines, which include an expansion and better utilization of a midwife’s competence, are welcome by the midwives in the three municipalities. The chief municipal medical officers are generally more reserved to such changes, but there were various opinions. Some are more positive than others. This shows that there are still profession conflicts between midwives and GPs, even though the interviewees mainly gave an impression of professionalism and respect for the other party. Theoretical reasons for this resistance can be the doctors’ fear for loss of identity, i.e. the loss of their established position within municipal maternity care, and the loss of influence and information about their patients, as pointed out in the analysis.

It has been found that the professional conflict between midwives and doctors has been strongest in C municipality. According to an alternate change theory, conflict can also foster change. It can appear that the fact that the two parties are in disagreement about how to cooperate within maternity care, pushed the public health center in one of the municipalities to utilize the new policy guidelines in order to get a better backing in the conflict. The fact that the other municipalities do not experience such a strong professional conflict and have not initiated plans within midwifery care can also provides prove for that a conflict enhances change.

Another finding is that leaders play an important role as initiators and facilitators of changes. In the one municipality, which has shown most progress in planning the introduction of new
policy guidelines, the leader was the initiator for the project. The leader in this municipality seems to have been most updated about the recent suggestions from the government within maternity care. This could be because of the conflicts, as explained above, but it also shows an engaged and motivating leader. Theory about charismatic leadership explains that leaders, which show certain characteristics, can more successfully implement change. The leader in this municipality showed most of these necessary traits, which are to be envisioning, energizing and enabling. The reason for this cannot be identified with certainty, i.e. if the leader is a charismatic leader generally, or if this engagement is demonstrated because of the mentioned tension between the professions.

Support for the assumption that leader traits are important factors can also be found in the fact that in the other two municipalities no initiatives and no changes seem to have happened so far. The strong positive support for the new policy guidelines from the midwives in all municipalities did not seem to have an effect, unless the leader was also convinced. This finding can imply that leaders have to be more aware of their role in the design and redesign of municipal structures. This might or might not be the case today. Further, it can be suggested that policy makers can be conscious about that information has to reach local leaders on all levels in the municipalities.

These findings cannot be generalized. Nevertheless, they give an idea about how municipalities approach changes. In addition, it has to be pointed out that this conclusion is not final. Changes might happen in coming years, when the focus maybe shifts from financing of outpatients to preventive care and with that midwifery services.

As for now, very little has happened in terms of restructuring municipal midwifery services according to the policy suggestions. The results show three findings: a) either no changes have happened, or b) new projects and duties were introduced on other premises then the Coordination Reform, or c) plans are made but not fully implemented yet.

An additional remark can be made about the discussed contract. The contract within midwifery care was formulated general by stating the existing task distributions within maternity care on primary and secondary care level. Therefore, the contract does not bind the municipalities to changes within midwifery services. Because of this, and at this point in time, the contract seems to be an ineffective instrument when it comes to facilitating the
implementation of new policy guidelines within maternity care. The reasons for this can be divers. One argument can be the time factor, i.e. that the contract is in development and more elaborate statements will be included in the following years. Also, it can be argued that too much freedom was given to the negotiation parts in the design of the contract. National guides on the design of the contract within maternity care can be seen to be too vague.

Several informants mentioned the lack of financing and economical incentives as a reason for no implementation. The informants stated that the municipalities are prioritizing those parts of the Coordination Reform, which are followed by economical incentives and consequences. This is a sound argument, as the theoretical framework in this thesis also supports it. On the other hand, it was also found that active engagement, e.g. through the leader, could result in new possibilities, i.e. national project funds, as explained above.

During the interviews and the process of the study, it became questionable if all the informants were actually familiar with the white paper and policy guidelines within maternity care. Some informants showed a good understanding of the situation and future projections, whereas some had to be informed in more detail during the interviews. A point to note here is that municipalities maybe need to be educated more actively about new policies by the government.

Further research within this field can be advocated by three factors. Firstly, the time factor; it is important to follow-up the development in municipal midwifery service in future years. Effects might come only in several years. Already now, this study indicates, which determinants can have an influence on decision-making in municipalities, and specifically in maternity care. Financial incentives, sufficient information about new policy guidelines, and the initiative on a leader level are important to consider for future work and implementation aid in this area.

Secondly, new guidelines within post-natal care are announced for early 2013. These guidelines will concretize the white papers’ suggestions within post-natal care. At this point in time a draft of this report is available online to be reviewed. In this draft there are, among others, strong recommendations regarding post-natal home visits carried out by midwives. The suggestion is that women and newborns, where it is considered to be as save to follow
them up locally as at the hospital, shall be provided with 1-2 post-natal visits from the local midwife within the first week after returning home from the maternity ward at the hospital. This shall be in addition to the visits of the public health nurses. It has to be pointed out that this document is preliminary and subjected to possible changes after review rounds (Høringsutkast – Nasjonal retningslinje for barselomsorgen, 2012).

The third factor is further research in district municipalities, i.e. ones with long distances to hospitals. The municipalities in this study have provided an understanding on how organizational change and restructuring can be handled in quite central areas. Norway has though many municipalities with long distance to the next hospital, i.e. 2-3 hours or more. In these municipalities it can be assumed that accompaniment service plays a major role, together with decentralized midwifery care. Therefore, a research of municipal midwifery care in small and district municipalities can be of interest.
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APPENDICES

Appendix I: Description of data use from SSB in selection of units for analysis

The data for the two variables in the need criterion are obtained from Statistics Norway (SSB). Data about the number of women between 20 – 34 years living in the municipality was handled in the follow way: the average of the population size this age group in the last 3 years was calculated for each municipality in the county. Accordingly, the average number of livebirths in the last 3 years in each municipality was calculated. The data shows that these two variables are related to the general population size in a municipality. That means that municipalities with a higher population size, also have a higher percentage of women in the relevant age group, and consequently have more livebirths. On the contrary, municipalities with lower population size have a lower percentage of women in the relevant age group and a lower amount of livebirths.
Appendix II: Interview guides for first round of interviews (pilot interviews)

**Interview guide for midwives**

1. What does your work as a midwife in this municipality consist of today?
   - Consultations with pregnant women?
   - Home visits before birth? Home visits after birth?
   - Administrative task?
   - Other?

2. What changes have you experienced in your work, e.g. additional tasks, since the introduction of the coordination reform 1st Jan.?
   - No changes → go to question 8.

3. Have you been involved in the process where these changes were negotiated?

4. What arena was used in this process? (meetings, etc.)

5. Could you bring in your own ideas and suggestion?
   - Yes, which?
   - No.

6. What are the expected results of these agreements? How do you think your working day will look like after these agreements are implemented?

7. How do you evaluate the results of the agreement/changes in terms of
   a. work load for you?
   b. quality of the health care service for the patients?
   c. other dimensions?

8. Have you been informed about any changes concerning your job as a midwife that are supposed to happen in the near future because of the coordination reform?
   - Yes, which?
   - No information → go to question 11.

9. Have you been invited to participate in the process, which shall establish agreements between the municipality and the health trust in the field of midwifery?

10. Do you have ideas/suggestion/thoughts about changes that should be implemented through the coordination reform within midwifery?

11. Do you think the coordination reform will bring about any changes for midwifery with the municipality?
Interview guide for employees in leading positions with municipal health care services

1. What does the work of midwives in this municipality consist of today?
   - Consultations with pregnant women?
   - Home visits before birth? Home visits after birth?
   - Administrative task?
   - Other?

2. What changes have happened in the field of midwifery, e.g. additional tasks, since the introduction of the coordination reform 1st Jan.?
   - No changes → go to question 8.

3. Who has been involved in the process where these changes/agreements were negotiated?
   - Have midwives also been included in the process?

4. What arena was used in this process? (meetings, etc.)

5. Has this municipality establish any form of cooperation with other municipalities in order to provide new services (i.e. the changes mentioned before)?

6. What are the expected results of these agreements? How will the working day of midwives look like after these agreements are implemented?

7. How do you evaluate the results of the agreement/changes in terms of
   a. work load for you?
   b. quality of the health care service for the patients?
   c. other dimensions?

8. Are any changes planned to happen concerning midwifery in the near future because of the coordination reform?
   - Yes, which?
   - No information → go to question 12.

9. Who has been invited to participate in the process, which shall establish agreements between the municipality and the health trust in the field of midwifery?

10. Do you have ideas/suggestion/thoughts about changes that should be implemented through the coordination reform within midwifery?

11. Do you plan to work together with other municipalities within the field of midwifery?
   - Yes, how & why?

12. Do you think the coordination reform will bring about any changes for midwifery with the municipality?
Appendix III: Interview guides for second round of interviews

Interview guide for midwives

Introduction
1. Which tasks do you have today as a midwife in this municipality?
2. What information have you received about Coordination Reform in relation to midwifery?

Role / duties / responsibilities
3. Have you experienced any changes in your job since January 1st?
4. How are duties and responsibilities in antenatal, birth and post-natal care organized between GPs, midwives and public health nurses?
5. What do you think about this division of duties?
6. Have you as a midwife received a more central role in antenatal, birth and post-natal care since January 1st?
7. Do you know of any planned changes within local midwifery service in this municipality in relation to the Coordination Reform?

Resource utilization (number of jobs, demand & needs, jobs)
8. How many midwives are working in the municipality?
9. What employment percentage do they have?
10. Do you work elsewhere?
11. Are there enough midwives employed by the municipality to meet the need, i.e. to offer midwifery services to all pregnant women?
12. If you got or will get new tasks and responsibilities, there will be a need to expand midwifery services?
13. How are recruitment possibilities for midwives in the municipality? I.e. do you think it will be easy to recruit more midwives to the municipality?
14. What do you think about that midwives can work both in a municipality and the local hospital?

Information exchange
15. How does information exchange about patients between midwives, GPs, nurses and hospital work?
16. Do you know about any changes in the information exchange? (i.e. new technology, …)

Education / skills
17. How do you professionally keep yourself updated? (e.g. courses,…)
18. In relation to possible new duties, will you receive training in these?

Selection and Resource Level
19. Which criteria do you use in the selection of risk pregnancies?
20. Do you think women with risk pregnancies get the attention and follow-up they need?

Accompaniment services
21. How is accompaniment service organized in the municipality?

Other topics / follow-up questions

Interview guide to the employees at management level
Introduction
1. How is midwifery service organized in the municipality?
2. Which tasks do midwives have in the municipality today?
3. What information have you received about Coordination Reform in relation to midwifery care?

Role / duties / responsibilities
4. Have there been any changes in midwifery care since January 1st?
5. How are duties and responsibilities in antenatal, birth and post-natal care organized between GPs, midwives and public health nurses?
6. How does this division of duties workout?
7. Did midwives get a more central role in antenatal, birth and post-natal care since January 1st?
8. Are there any planned changes in the local midwifery service in this municipality in relation to the Coordination Reform?

Resource utilization (number of jobs, demand & needs, jobs)
9. How many midwives are working in the municipality?
10. What employment percentage do they have?
11. Do they work elsewhere?
12. Are there enough midwives employed by the municipality to meet the need, i.e. to offer midwifery services to all pregnant women?
13. If midwives are to get tasks and responsibilities, will there be a need to expand midwifery care?
14. How are recruitment possibilities for midwives in the municipality? I.e. do you think it will be easy to recruit more midwives to the municipality?
15. What do you think about that midwives can work both in a municipality and the local hospital?

Information exchange
16. How does information exchange about patients between midwives, GPs, nurses and hospital work?
17. Are there any planned changes in the information exchange? (i.e. new technology, ...)

Education / skills
18. How are the skills of health workers in antenatal, birth and post-natal care maintained?
19. In terms of new tasks and duties, are there any courses planned?

Selection and Resource Level
20. Do you think women with risk pregnancies get the attention and follow-up they need?
21. Is there enough capacity in the hospital for these women?

Accompaniment services
22. How is accompaniment service organized in the municipality?

Other topics / follow-up questions

Interview guide to chief municipal medical officer / general practitioner

Introduction
1. Which tasks do GPs have in antenatal, birth and post-natal care in the municipality?
2. How does interaction reform influence GPs? Specially in relation to antenatal, birth and post-natal care?

Role / duties / responsibilities
3. Have there been changes in work tasks within antenatal, birth and post-natal care since January 1st for GPs?
4. How are duties and responsibilities within antenatal, birth and post-natal care organized between GPs, midwives and public health nurses?

5. Is this division of work standardized and written down?

6. What do you think about this division of duties? (i.e. effective? changes needed?)

7. What do you think of the proposal that the midwife should have a more central role in within antenatal, birth and post-natal care from January 1st? (e.g. within post-natal care, provide a more complete follow-up)

8. Do you know of any planned changes within antenatal, birth and post-natal care in this municipality in relation to the Coordination Reform?

Resource utilization (number of jobs, demand & needs, jobs)

9. How is the cooperation with midwives in the municipality?

10. Do you think that the municipality has sufficient capacity to cater for all pregnant women who need maternity care services?

Information exchange

11. How does information exchange about patients between midwives, GPs, nurses and hospital work?

12. Do you know about any changes in the information exchange? (i.e. new technology, ...)

Continuing Education / Skills

13. How do GPs keep themselves updated within antenatal, birth and post-natal care?

Selection and Resource Level

14. What criteria do you use in the selection of risk pregnancies?

15. Do you think women with risk pregnancies get the attention and follow-up they need?

Accompaniment services

16. How is accompaniment service organized in the municipality?

Other topics / follow-up questions
Appendix IV: Definition of concepts within maternity care

- Pregnancy check-ups / antenatal check-ups (in Norwegian: svangerskapskontroll): These check-ups typically include counseling in various topics of importance during the pregnancy like advice about diet. There is also a clinical part to the consultations, which consists of symphysis-fundal distance measurement, auscultation of the fetal heart, weighing, blood pressure measurement, and check of protein and glycosuria, among others (Retningslinjer for svangerskapsomsorgen, 2005).

- Post-natal check-ups (in Norwegian: etterkontroll): These check-ups represent a follow-up of women after birth. They include counseling of women about various topic they might wonder about, information about prevention, and when necessary clinical examination.

- Post-natal home visit (in Norwegian: barselbesøk): These home visits are today performed by public health nurses and are mostly focused on the well being of the newborns. The parents get counseling in topics about the care for newborns. The public health nurse follow-ups the growth of the child and its general health (Kommunenes helsefremmede og forebyggende arbeid i helsestasjons- og skolehelsetjeneste, 2004).

- Health card for pregnant women (in Norwegian: helsekort for gravide): The health card contains documentation of what type of service was provided by each health care worker to the woman, i.e. what information is given and which clinical examinations are carried out. It is therefore also a tool for detecting potential risks for the woman and the fetus. Beyond this purpose of managing the care given, the card gives a quality assurance and legal documentation (St.meld. nr. 12, 2009).

- Accompaniment service (in Norwegian: følgetjeneste): This service entails that a midwife or a doctor follow women in labor to the next hospital, if the traveling distance is more than one hour. This is in order to create medical professional responsibility and to give women security during labor on the way to the hospital (St.meld. nr. 12, 2009).
• Project “Pregnant women at work” (in Norwegian: gravid og i arbeid):  
Through this program, midwives shall follow-up pregnant women working for the municipality to prevent early sick leave among these. Meetings between the midwife, the expecting mother and the superior leader serve as arena for this program.

• Standard duties of midwives:  
On the bases of the information from the interviewees the following tasks were defined as standard duties for midwives in the three municipalities: antenatal check-ups; arranging counseling groups within various topics like giving birth and breastfeeding; addition follow-up to pregnant women with mental and addiction problems; tight cooperation with public health nurses in special cases where women need additional follow-up.

• Standard duties of GPs:  
On the bases of the information from the interviewees the following tasks were defined as standard duties for general practitioners within maternity care in the three municipalities: antenatal check-ups; post-natal check-ups; counseling in various health care issues both to women and newborns.
Appendix V: Policy guidelines and interview guide topics

The following table shows how the topics in the interview guide (second round) are connected to suggested policy guidelines within maternity care in the white papers and reports, which are the bases of this study.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Policy guidelines</th>
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<tbody>
<tr>
<td>Tasks of midwives and GPs in maternity care</td>
<td>“Regular meetings shall be held between general practitioners, public health nurses, midwives and others in the municipality in partnership with various groups and organizations in the regional health trust.” (Et trygt fødetilbud, p. 20)</td>
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<td>Cooperation between professions</td>
<td>“A good use of the expertise of these various health professions suggests that agreements about work- and duty distributions should arranged.” (Et trygt fødetilbud, p. 19)</td>
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<tr>
<td>Information exchange between professions</td>
<td>“The Coordination Reform will require the establishment of systems to ensure a mandatory interdisciplinary cooperation with good exchange of information. It is important to ensure the transition between local and specialist services. All participants must be connected to the Norwegian Health Network.” (Et trygt fødetilbud, p. 15)</td>
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<tr>
<td>Capacity within maternity care services</td>
<td>“Early discharge, which entails that the municipality is responsible for following up healthy women and newborns in the postnatal period requires that municipal health services have the available expertise and resources with the necessary capacity to handle follow-up in the first time after birth. This applies particularly for necessary examinations of newborns and implementation of recommended newborn screening. It must be ensured that the necessary skills and capacity to follow the development of jaundice in newborns are available. Women who travel home before breastfeeding is well established, need special attention.” (Et trygt fødetilbud, p. 18)</td>
</tr>
<tr>
<td>Competence, equipment and development</td>
<td>“Regional health trusts and municipalities should offer regular interdisciplinary subject courses to GPs, public health nurses, physiotherapists and midwives. Regular meeting places for local and specialist healthcare services should be established.” (Et trygt fødetilbud, p. 19)</td>
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<tr>
<td>Recruitment possibilities</td>
<td>“The parliament generally wishes to reverse the trend of growth in specialist health care services. On this background, it is worth noting that municipal midwifery and maternity services for women and their families have insufficient capacity and availability. There is a need for service development and in that respect, the white paper introduced the concept of district midwives. A district midwife role, which can provide service on both levels, shall be assessed and developed as a seamless service offer. Continuity of care and seamless services are an important principle in the Coordination Reform.” (Utviklingsstrategi for jordmortjenesten, 2010, p. 48)</td>
</tr>
</tbody>
</table>
| Accompaniment services | “The assumption is a need for a round the clock emergency services and accompaniment service where there is a half hour of travel to the birthplace.”  
  
  (Et trygt fødetilbud, p. 23) |
|---|---|
| Changes to tasks due to the Coordination Reform | “Municipalities should ensure that the local midwife may have a central role in the ante-natal and post-natal care in collaboration with health trusts, public health centers and GPs.”  
  
  (St.meld. nr.47, 2009, p.71)  
  “The government intends a better organization of service and a better utilization of resources and personnel to provide comprehensive ante-natal, birth and post-natal care. It is important that the entire service is seen in context to provide continuous patient care.”  
  
  (St.meld. nr. 12, 2009, p. 8) |
| Expectations to midwifery service | “To ensure good use of resources and continuity of patient care, midwives must be able to provide a service that utilizes their combined expertise.”  
  
  (St.meld. nr. 47, 2009, p. 70) |