Summary

The Euro-Peristat project, with international comparison of maternity outcome data since 1999 showed that the Netherlands had a relatively high perinatal mortality rate compared to other Western European countries. Comparison of mortality rates between European countries is challenging due to different registration systems. Nevertheless, it has been suggested that these high rates could partly be explained by the division between midwife-led care and obstetrician-led care as this could lead to a suboptimal level of collaboration between maternity care providers, thereby contributing to adverse events and incidents. Discussions arose both nationally and internationally regarding the sustainability of the current system. It was argued that the system could be improved by changing the organizational structure towards a model of integrated care.

At present, Dutch maternity care is undergoing major changes and there is a shift towards an “integrated model of care”. The goal of integrating maternity care is to improve the quality of care in the entire spectrum by working multi-disciplinary in which the client plays a central role.

The Introduction (chapter 1) gives insight in maternity care in the Netherlands, the roles of midwives and obstetricians over time, the models of care and the need for a new model of care, what women and maternity care professionals consider important in maternity care, the reasons for integrating maternity care and the challenges of integrating maternity care. Triangulation of methods (questionnaires, interviews and focus groups) were used with the aim to:

- To examine maternal and perinatal outcomes and medical interventions among women who are referred from primary to secondary care during labour.
- To examine experienced continuity of care among women in relation to experienced quality of care and perception of care;
- To examine which factors are essential to effectuate successful integration of primary and secondary maternity care in practice, according to maternity care professionals and other stakeholders;
- To define the facilitators and barriers when integrating maternity care.

In chapter 2 the results are presented of a retrospective cohort study into labour process and outcomes after intrapartum referral from primary to secondary care in the Netherlands. We examined reasons for referral, management of labour and maternal and neonatal outcomes among women who were referred during labour. Descriptive analyses were performed on data obtained from patient records examining the reasons for referral, interventions after referral, mode of delivery, maternal and neonatal outcomes. The study population included 600 pregnant women. Three out of...
four women were referred for moderate risk indications: request for pain relief (30.5%), meconium stained fluid (25.3%), failure to progress during first stage of labour (14.0%) and prolonged ruptured membranes without contractions (12.5%). Of all women, 65.7% had a spontaneous vaginal delivery and 59.7% received some kind of pain relief. Acute referral for fetal distress occurred in 5.5%. Of the neonates 2.7% had an Apgar score of 7 or less after five minutes and 1.2% had an umbilical cord pH < 7.05. Postpartum complications occurred among 11.0% of the referred women.

The conclusion of this chapter is that women who are referred during labour have a high probability of spontaneous vaginal delivery.

To improve continuity of care and satisfaction for this group of women, management of labour could be continued by trained primary care midwives.

In chapter 3 the findings of a survey evaluating experienced continuity and quality of care and women’s perception of labour are presented. The primary aim was to compare experienced continuity of care among women who received midwife-led versus obstetrician-led care. Secondly, to compare experienced continuity of care with a. experienced quality of care during labour and b. perception of labour.

To measure experienced continuity of care, the Nijmegen Continuity Questionnaire was used. Quality of care during labour was measured with the Pregnancy and Childbirth Questionnaire, and to measure perception of labour we used the Childbirth Perception Scale.

325 women consented to participate (response rate 41%). Experienced personal and team continuity of care during pregnancy were higher for women in midwife-led care compared to those in obstetrician-led care at the onset of labour. Experienced continuity of care was moderately correlated with experienced quality of care although not significantly so in all subgroups. A weak negative correlation was found between experienced personal continuity of care by the midwife and perception of labour.

This study suggests that experienced continuity of care depends on the care context and is significantly higher for women who are in midwife-led compared to obstetrician-led care during labour. It will be a challenge to maintain the high level of experienced continuity of care in an integrated maternity care system.

Experienced continuity of care seems to be a distinctive concept that should not be confused with experienced quality of care or perception of labour and should be considered as a complementary aspect of quality of care.

In chapter 4 the experienced job autonomy among maternity care professionals in the Netherlands is described. This study aimed to assess how maternity care professionals in the Netherlands perceive their job autonomy in the Dutch maternity care system and whether they expect a new system of integrated maternity care to affect their experienced job autonomy.
The Leiden Quality of Work Life Questionnaire was used to assess experienced autonomy. 799 professionals participated in this research of whom 362 were primary care midwives, 240 were obstetricians, 93 clinical midwives and 104 obstetric nurses. Significant differences were seen in experienced job autonomy between maternity care professionals. The mean score for experienced autonomy was highest for primary care midwives, followed by obstetricians, clinical midwives and obstetric nurses. Primary care midwives scored highest in expecting to loose job autonomy in an integrated care system.

When changing the maternity care system it will be a challenge to maintain a high level of experienced job autonomy for professionals. A decrease in job autonomy could lead to a reduction in job related wellbeing and in satisfaction with care among pregnant women.

In chapter 5 the findings are shown of a qualitative study using interviews and focus groups which gave insight into the opinions of maternity care professionals and other stakeholders on the integration of midwife-led care and obstetrician-led care and on facilitating and inhibiting factors for integrating maternity care.

Seventeen purposively selected stakeholder representatives participated in individual semi-structured interviews and twenty-one in focus groups.

Three main themes were identified with regard to integrating maternity care: client-centered care, continuity of care and task shifting between professionals. Opinions differed regarding the optimal maternity care organization model. Participants considered the current payment structure an inhibiting factor, whereas a modified payment structure based on the actual amount of work performed was seen as a facilitating factor. Both midwives and obstetricians indicated that they were afraid to loose autonomy.

An integrated maternity care system may improve client-centered care, provide continuity of care for women during labour and birth and include a shift of responsibilities between health care providers. However, differences of opinion among professionals and other stakeholders with regard to the optimal maternity care organization model may complicate the implementation of integrated care. Important factors for a successful implementation of integrated maternity care are an appropriate payment structure and maintenance of the autonomy of professionals.

In chapter 6 the results of a Delphi study are reported, consisting of three rounds. This study provides insight into the opinions of maternity care professionals about integration of care and involvement of primary care midwives in the intrapartum care of women with “moderate risk” factors. A purposively selected heterogenic panel of 50 professionals, including obstetricians, primary care midwives, clinical midwives and obstetric nurses, answered questions anonymously.
Although primary care midwives would like to expand their responsibilities and tasks regarding “moderate risk” indications, consensus among panel members was only reached concerning the indication of prolonged rupture of membranes for which the primary care midwife could remain the caregiver.

This study showed that most participants support more integration of care during labour. The lack of consensus amongst Dutch maternity care professionals with regard to the distribution of responsibilities and tasks for “moderate risk” indications is a challenge.

In chapter 7 a descriptive study is presented giving insight into the level of consensus among maternity care professionals about facilitators and barriers related to integration of midwife-led and obstetrician-led care.

131 (response 44%) primary care midwives, 51 (response 51%) clinical midwives and 242 (response 25%) obstetricians participated in a questionnaire survey. There was consensus about the clinical midwife caring for labouring women at moderate risk of complications. Although primary care midwives themselves were willing to expand their tasks there was no consensus among respondents on the tasks and responsibilities of the primary care midwife.

Professionals agreed on the importance of good collaboration between professionals who should work together as a team. Respondents also agreed that there are conflicting interests related to the payment structure, which are a potential barrier for integrating maternity care.

This study showed that professionals are positive regarding an integrated maternity care system but primary care midwives, clinical midwives and obstetricians have different opinions about the specifications and implementation of this system.

Our findings are in accordance with earlier research, showing that it is too early to design a blueprint for an integrated maternity care model in the Netherlands. To bring about change in a maternity care system, an implementation strategy should be chosen that accounts for differences in interests and opinions between professionals.

In the general discussion in chapter 8, experienced maternity care by women, professionals and other stakeholders was evaluated. Factors were identified for a successful integration of primary and secondary maternity care. Consensus was reached regarding the importance of collaboration and continuity of care but no consensus was reached regarding the contents of care. Therefore, a blueprint for the optimal maternity care system cannot be given on this basis.

Themes that emerged from this thesis were continuity of care, collaboration between maternity health care professionals, pregnant women with a “moderate-risk” indication for complications and job-autonomy among maternity care professionals.
It is of importance to maintain personal continuity of care for women when integrating maternity care. Optimizing collaboration between midwife-led care and obstetrician-led care, in which referral is smooth without loss of information, could increase experienced continuity of care. In addition, working in small teams of caregivers, in which women are seen by a maximum limited number of caregivers will be of great benefit for the experienced continuity of care for women.

To improve collaboration and quality of care, more multidisciplinary guidelines at national level and multidisciplinary training should be realized. Consideration should be given to conflate the roles of primary care and clinical midwives. If primary care midwives take care of women with a “moderate risk” indication, Dutch primary care midwives must be trained to take on additional tasks. In both cases appropriate changes must be made to midwives’ legal scope of practice.

The challenge lies in finding the balance between maintaining a high level of job autonomy among professionals and good collaboration between professionals based on the needs of women when moving towards a system of integrated maternity care.

This thesis shows that differences in opinions exist among professionals and other stakeholders with regard to the optimal maternity care organization model. This complicates the implementation of integrated care. As people are more likely to adopt new ways of organizing, thinking and acting if they are actively involved in the decision-making process in a bottom-up approach it is of great importance to involve professionals from the start when changing the maternity care system.

Further research is needed to evaluate the effects of different models of integrated care in practice on maternal and neonatal outcome, satisfaction among women, wellbeing among professionals and cost effectiveness. By comparing the outcomes and experiences between regions experimenting with integrated care models, lessons can be learned to optimize maternity care.