The contribution of continuity of midwifery care to high quality maternity care

A report by Professor Jane Sandall for the Royal College of Midwives
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Women’s access to quality midwifery services has become a part of the global effort in achieving the right of every woman to the best possible health care during pregnancy and childbirth.

1.0 What does high quality maternity care look like?

National policies addressing maternity services have often ignored the centrality of the midwifery workforce and how it contributes to high quality and safe care. The dimensions of care quality often used in UK country policies draw upon a definition in Crossing the Quality Chasm as “safe, effective, patient-centred, timely, efficient, and equitable care” 1. Thus high quality maternity care should: do no harm to people who use the service or those that provide it; is responsive and creates no delay when complications occur; is organised to maximise efficient use of resources including the maternity care workforce; provides evidence based care; is women and family centred which involves facilitating informed decision making, women and families feeling safe, respected, treated with dignity and having their voices listened and responded to; is organised so that services that some women find hard to reach are accessible and equitable. In addition, a high quality maternity care system should provide optimal maternity care that follows the principle of “effective care with least harm” and supports the beneficial practices that support women’s own innate capacities or the physiologic process of childbirth.

2.0 Current Policy in the United Kingdom

Continuity of care has been at the heart of maternity policy in England since 1993 with the publication of Changing Childbirth 2 and an emphasis on Choice, Continuity and Control, in the NSF Maternity Standard 3 and Maternity Matters 4. Ambitions regarding continuity of midwife care are also expressed in Scottish 5, Welsh 6 and Northern Irish Policy 7.

The current English Government has stated its commitment to choice in maternity services 8. One of the ambitions of the current NHS Mandate is to help give children the best start in
life, and promote their health and resilience as they grow up. A long-standing problem with maternity services has been concerns about coercive and disrespectful behaviour experienced by women and families, in particular by ethnic minorities. Thus the NHS Mandate aims to improve inequalities faced during pregnancy and maternity, and to improve the experience of women and families during pregnancy and in early years.

- Through giving women the greatest possible choice of providers, building better relationships between women and midwives by personalising their care and reducing postnatal depression through earlier diagnosis as well as better support.
- Specifically stating that ‘every woman has a named midwife who is responsible for ensuring she has personalised, one-to-one care throughout pregnancy, childbirth and during the postnatal period, including additional support for those who have a maternal health concern’ (p17).

Current National Institute for Health and Clinical Excellence (NICE) antenatal and postnatal quality care standards both state women should have a named midwife. In the postnatal period this person is referred to as a named healthcare professional. NICE intrapartum care guidelines incorporate the importance of 1 to 1 care in labour and birth in their recommendations for support in labour.

However, the level of implementation of continuity of care models and how many women have a named midwife who cares for them throughout their pregnancy and birth is unknown. In the last national survey of 25,488 women’s experiences of maternity care in England in 2010, 43 per cent of women did not see the same midwife every time or almost every time during pregnancy, 8 per cent did not have the name and phone number of their midwife, 23 per cent reported that when they contacted their midwife they were not given the help they needed, 75 per cent of women had not met any of the staff who cared for them during their labour and birth before, 27 per cent reported they did not have definite confidence and trust in staff caring for them in labour. Continuous support in labour from a person other than the woman’s partner or family member has been shown to be effective.

In busy maternity units, it is often difficult for midwives to give such one-to-one support and 22 per cent of women reported being left alone in labour and shortly after the birth and unhappy about it.
3.0 What is the difference between midwife-led continuity models of care and care in midwife-led settings?

Midwife-led continuity of care can be provided through continuity models of care which provide a named midwife who follows women throughout pregnancy, birth and the postnatal period to all women, both low and high risk and in all settings including obstetric units.

Midwife-led care can also be provided in midwife-led settings such as home, freestanding and alongside hospital birth centres for women for women defined as having a low clinical risk.

3.1 How does it differ to standard care?

The philosophy behind midwife-led continuity models includes: an emphasis on the natural ability of women to experience birth with minimum intervention and monitoring the physical, psychological, spiritual and social wellbeing of the woman and family throughout the childbearing cycle. A package of care includes: continuity of care throughout pregnancy, birth and the postnatal period; providing the woman with individualised education and counselling; being cared for by a known and trusted midwife during labour; and the immediate postpartum period; and identifying and referring women who require obstetric or other specialist attention.

Midwife-led continuity of care is provided in a multi-disciplinary network of consultation and referral with other care providers. Midwife-led continuity of care can be provided through a team of midwives who share the caseload, often called ‘team’ midwifery. Another model is ‘caseload midwifery’, which aims to ensure that the woman receives all her care from one midwife or practice partner. Midwives follow women across the care pathway and provide antenatal care in community and hospital settings, intrapartum care in the home, midwife-led units and obstetric units and postnatal care in hospital and at home to women who are both low and high risk. This contrasts with shared-care models, where responsibility is shared between different healthcare professionals and women may not know their care providers or have met who is caring for them in labour previously.

There is some evidence around what factors are important for midwife-led models of care to be sustainable and avoid burnout. Low job control and long working hours are associated with higher levels of burnout in midwives. Ways of working that engender greater job control,
meaningful relationships with women and collegial support help midwives maintain work/life balance. Although there is greater agency for midwives in midwife-led models and settings, there can be a problematic interface with host units, and a clash of models and culture. Key areas affecting midwifery morale identified, in particular have been staffing levels, working relationships and organisational issues.

3.2 Why is continuity important to providers and users of health services?

Midwife-led continuity models of care have generally aimed to improve continuity of care over a period of time. Continuity has been defined by as having three major types - management, informational and relationship. Management continuity involves the communication of both facts and judgements across team, institutional and professional boundaries, and between professionals and patients. Informational continuity concerns the timely availability of relevant information. Both are important to managers and health care users.

Relationship continuity means a therapeutic relationship of the service user with one or more health professionals over time. Relationship/personal continuity over time has been found to have a greater effect on user experience and outcome. Thus the models of care that are the foci of this briefing are those that offer relational continuity across the maternity episode of care.

3.3 What is the effect?

3.3.1 Clinical outcomes

A substantial body of evidence now exists showing that care provided by midwives in continuity-of-care models (defined as care where “the midwife is the lead professional in the planning, organization, and delivery of care throughout pregnancy, birth, and the postpartum period”) contributes to high-quality and safe care in high-income countries. A Cochrane review of 13 trials involving 16,242 women that compared women who received midwife-led continuity of care with shared or medically led care found midwife-led care was associated with significant benefits for mothers and babies, and had no identified adverse effects.

Women who had midwife-led continuity models of care were less likely to experience regional analgesia (average risk ratio (RR) 0.83, 95 per cent confidence interval (CI) 0.76 to 0.90), episiotomy (average RR 0.84, 95 per cent CI 0.76 to 0.92), and instrumental birth (average
RR 0.88, 95 per cent CI 0.81 to 0.96). Women were more likely to experience no intrapartum analgesia/anaesthesia (average RR 1.16, 95 per cent CI 1.04 to 1.31), spontaneous vaginal birth (average RR 1.05, 95 per cent CI 1.03 to 1.08), attendance at birth by a known midwife (average RR 7.83, 95 per cent CI 4.15 to 14.80), and a longer mean length of labour (hours) (mean difference (hours) 0.50, 95 per cent CI 0.27 to 0.74). There were no differences between groups for caesarean births (average RR 0.93, 95 per cent CI 0.84 to 1.02).

Women who were randomised to receive midwife-led continuity models of care were less likely to experience preterm birth (average RR 0.77, 95 per cent CI 0.62 to 0.94) and fetal loss before 24 weeks’ gestation (average RR 0.81, 95 per cent CI 0.66 to 0.99), although there were no differences in fetal loss/neonatal death after 24 weeks gestation (average RR 1.00, 95 per cent CI 0.67 to 1.51) or in overall fetal/neonatal death (average RR 0.84, 95 per cent CI 0.71 to 1.00).

No trial included models of care that offered out of hospital birth at home or in a free-standing unit. All intrapartum care was provided either in an obstetric unit or a alongside midwife unit. The review includes trials that included women classified as ‘low risk’ and trials that included women who were classified as both ‘high and low’ risk. It also includes models of team and caseload midwifery. The effects were the same across team and caseload midwifery models and whether caseloads were low or mixed risk.

3.3.2 Women’s experience

Women receiving midwife-led continuity of care models were almost eight times more likely to be attended in labour by a known midwife. Women in the midwifery-led continuity care models reported higher ratings of maternal satisfaction with information, advice, explanation, venue of delivery, preparation for labour and birth, choice for pain relief and behaviour of the carer and control. Other studies have found that women who carry social complexity and find services hard to access, particularly value midwifery continuity models of care. Women also experienced increased agency and control, and more empathic care.

3.3.3 Efficiency

Based on scant existing evidence, there appears to be a trend towards a cost-saving effect for midwife-led continuity care compared to other care models. The estimated mean cost saving for each eligible maternity episode is UK£12.38. This translates to an aggregate saving of £1.16
million per year, if half of all eligible women avail of midwife-led care. This equates to an aggregate gain of 37.5 quality adjusted life years (QALYs) when expressed in terms of health gain using a NICE cost-effectiveness threshold of £30,000 per QALY. The uptake of midwife-led maternity services affects results on two levels, first by its role in determining caseload per midwife and thus mean cost per maternity episode, second at the aggregate level by determining the total number of women who switch to maternity-led services nationally.
4.0 Midwife led birth settings

Evidence with respect to birth settings is also increasing, where women are normally classified as low risk. A Cochrane review of midwife units located alongside an obstetric unit compared with conventional hospital labour wards found increased likelihood of spontaneous vaginal birth, labour and birth without analgesia or anaesthesia, breastfeeding at 6 to 8 weeks postpartum, satisfaction with care, and decreased likelihood of oxytocin augmentation, assisted vaginal birth, caesarean birth, and episiotomy. Although no difference occurred in infant outcomes, substantial numbers of women were transferred to standard care either before or during labour, because they no longer met eligibility criteria for the alternative setting.

Less evidence is available about freestanding midwife units and birth centres, but what does exist results in similar findings. A recent prospective study in Denmark which has a similar public maternal health system to the UK found important benefits, such as improved experience, reduced maternal morbidity, reduced use of birth interventions including caesarean sections, and increased likelihood of spontaneous vaginal birth compared with women who planned to give birth in an obstetric unit. No differences were observed in perinatal morbidity among infants of low-risk women who intended to give birth in the freestanding midwife unit or birth centre compared with infants of low-risk women who intended to give birth in the obstetric unit. However, 37 percent of primiparas and 7 percent of multiparas were transferred during or less than 2 hours after birth.

Birth experience and satisfaction with care were rated significantly more positively by FMU than by OU women. Significantly better results for FMU care were also found for specific patient-centred care elements (support, participation in decision-making, attentiveness to psychological needs and to wishes for birth, information, and for women's feeling of being listened to). Adjustment for medical birth factors slightly increased the positive effect of FMU care for high risk women. Furthermore, women without post-secondary education intending to give birth in an FMU had comparable and, in some respects, more favourable outcomes when compared to women with the same level of education intending to give birth in an OU. In this sample of low-risk women, the effect of intended place on birth outcomes did not differ with women's level of education.
A similar pattern has been found with planned out of obstetric unit birth for “low-risk” women. A recent observational study in England assessed outcomes by intended place of birth for women at low risk in midwife units and birth centres located alongside an obstetric unit, a freestanding or stand-alone midwife unit and birth centre, home, and obstetric units. For “low-risk” women, the overall incidence of adverse perinatal outcomes was low in all birth settings. For “low-risk” multiparas, no differences were reported in adverse perinatal outcomes between settings. However, the risk of an adverse perinatal outcome appeared to be significantly higher for nulliparas who planned to give birth at home compared with those who planned to give birth in an obstetric unit. For all women, the incidence of major interventions was significantly lower, including intrapartum caesarean section, and normal birth increased in all settings outside the obstetric unit. The overall intrapartum transfer rate ranged from 21 to 26 percent for all women, but was higher for nulliparas (36–45 per cent). The study also found that the cost to the National Health Service of intrapartum and related postnatal care, including costs associated with clinical complications, was lower for birth planned at home, in a freestanding midwife unit and birth centre and in an alongside midwife unit compared with planned birth in an obstetric unit.
5.0 Summary

Thus, overall, both the model of care and the place of birth are important influences on a range of health and clinical outcomes for mothers and babies, and have economic implications for the health system. It is also clear that the possibility always exists that women will need to transfer into an obstetric unit from an out-of-hospital setting, and that systems need to be in place to allow safe and timely transfer to obstetric care and expertise without financial, professional, and organisational barriers.

Midwife led continuity models of care contribute to improving quality and safety of maternity care at no additional cost. Women who receive care in these models are more likely to have effective care, a better experience, improved clinical outcomes, and with some evidence of improved access to care by women who find services hard to reach and better co-ordination of care with specialist and obstetric services. Midwife-led continuity models provide services for all women across all settings, whether women are classified as high or low risk and current evidence shows improved outcomes with no adverse effects in populations of mixed risk. In addition improved birth outcomes result where care is provided in obstetric units, although it is clear that women planning to give birth in midwife led birth settings have fewer intrapartum interventions including caesarean section.

Approximately 45 per cent of women are classified as low risk at the end of pregnancy and the challenge is to provide a choice of midwife led settings for this group of women, whilst improving quality of care for women are higher risk or with social complexity. It is with this group of women that midwife-led models of continuity of care have the potential to improve quality and safety of care, several models already exist such as caseloading for women classified as vulnerable, or midwife caseloading as part of a multi-disciplinary hospital based team for women with serious medical and obstetric complications and further research is needed on the potential for midwifery continuity models to improve quality of care for this group of women who arguably need intensive midwifery support and care.


