Evidence of clinical effectiveness

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This policy research briefing provides a summary of the key aspects of clinical effectiveness associated with midwifery unit care in England, and comments on the extent to which research in England is transferable. It also addresses professional and service development and the importance of developing characteristics of ‘resilience’ to extend access to midwifery unit care to many more women. The Maternity Unit Network policy research briefing *Philosophy of care and policy on midwifery unit care* explores the historical and policy context of midwifery unit care.

The Birthplace in England Programme

The Birthplace in England Research Programme has provided robust evidence about care in midwifery units and planned home births and how the safety and quality compares with planned care in an obstetric unit.

The findings on clinical outcomes are from a large, prospective, cohort study (Holloway et al, 2011). The main focus of the study was the care of healthy women with uncomplicated pregnancies. Planning to give birth in a midwifery unit (birth centre) achieves optimal clinical outcomes for mother and baby as well as reducing healthcare costs (Holloway et al, 2011; Schroeder et al, 2011, NICE 2014).

Birthplace demonstrated that planned care in a midwifery unit results in:

lower rates of regional analgesia, cesarean section, instrumental birth, episiotomy and less need for blood transfusion and higher level medical care, as well as an overall decrease in maternal morbidity (Holloway et al, 2011).

Importantly, there were positive outcomes for babies too:

For babies, planned midwifery unit care provided similar rates of healthy and adverse outcomes as traditional labour ward care, and initiation of breastfeeding was higher (Birthplace in England Collaborative Group, 2011).

There were numerous studies within and linked to the Birthplace Programme, including a case study of a single inner-city freestanding midwifery unit which focused on women’s experiences. Women’s reports demonstrate the differences in philosophy and way of working between midwifery units and obstetric units that give rise to different levels of intervention. Macfarlane, Rocca-Ihenacho and colleagues found that eligible women who booked for birth centre care were more likely to attend antenatal classes and find them useful and were less likely to be induced (Macfarlane et al, 2014). Women who started labour care at the birth centre were more likely to use non-pharmacological methods of pain relief, and were less likely to use opioid drugs (Pethidine) than similar women who
started their care at the hospital. They were more likely to be able to move around in labour and less likely to have their membranes ruptured or have continuous CTG. They were more likely to push spontaneously when they needed to rather than under directed pushing, to choose their position for birth and be off the bed, in contrast to women booking hospital care. Most women who delivered at the birth centre reported that they had chosen whether or not to have a physiological third stage, while ‘a worrying proportion at the hospital reported that they had not had a choice’. A higher proportion of women at the birth centre reported skin to skin contact with their baby in the first two hours after birth (Macfarlane et al, 2014). The authors concluded that this model of care ‘leads to greater choice and a better experience for women who opted for it’ (Macfarlane et al, 2014).

NICE guidance

The latest NICE Intrapartum Care guideline for healthy women (NICE, 2014) emphasises that all pregnant women should be supported in their choice of birth setting, wherever they choose to give birth. It recommends that:

‘all low risk women are advised that planning to give birth in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit’ (NICE, 2014).

Booking, referral and transfer in an integrated maternity service

In England, some units operate an opt-out policy in which all apparently low-risk women are initially referred to a midwifery unit for care, and if they prefer to use the obstetric unit they then arrange to change. Other units operate an opt-in policy in which women are routinely referred for care in the obstetric unit unless they request, or are offered, a planned home birth or care in a midwifery unit. It is important that women are given positive, reliable information and that their autonomy is respected. They need support and personalised care according to their medical history, events in their pregnancy and their psychosocial needs and preferences.

Women booking midwifery unit care should be told that they may be advised to transfer to obstetric care during pregnancy or while in labour and common reasons for transfer. Transfer rates from midwifery units during labour in the Birthplace study were 21-26% overall and higher for first-time mothers (36-40%), particularly for older women (Rowe, Fitzpatrick et al, 2012). Rowe and colleagues have also published a qualitative study on women’s experiences of transfer during labour (Rowe, Kurinczuk et al, 2012). The integration of maternity services in the UK is the key to safety and quality. Women can be referred for a medical opinion at any time and may transfer for obstetric care or remain midwifery led according to need.

The positive Birthplace in England findings for planned midwifery unit care are for women defined as being at ‘low risk’ of developing complications. The criteria set in the NICE Intrapartum Care guideline were used as the basis for the analysis (Holloway et al, 2011). Careful clinical assessment throughout pregnancy and labour is important, as well as clear criteria for booking women for midwifery unit care (NICE 2014).
**To what extent are the Birthplace findings transferable?**

Maternity care in Scotland, Wales and Northern Ireland is broadly similar to care in England, though in remote, mountainous and rural areas transfer times are greater (Hogg et al, 2007; NCT 2011). Despite geographical challenges, or because of them and the low population density that is related to rurality, midwifery-led community maternity units in Scotland are seen to make an ‘enormous contribution’ and to have greater potential (Hogg, et al, 2007). There is also variation in England, with areas like Cumbria and Cornwall having much lower population density than average, resulting in longer journey times to reach obstetric and neonatal services (RCOG, 2014).

The Birthplace findings are not directly transferable to other countries which have different models for maternity care, different geography, history of midwifery care and culture (Dixon et al, 2014). However, a number of countries are carrying out large cohort comparison studies, using the planned place of birth approach, such as New South Wales, Australia (Homer, et al, 2014) and New Zealand. In the five-year period 2006-10, 16.6% of ‘low-risk’ women in New Zealand booked their care in a primary maternity unit (midwifery-led birthing unit), with a higher rate for the indigenous population of Māori women. Outcomes for women and babies are positive, as in the Birthplace study, however, the low incidence of adverse perinatal outcomes in ‘low-risk’ women means that the studies are not powered to identify small differences in rare outcomes (Dixon et al, 2014; Homer, et al, 2014).

**Education and professional development**

Midwifery units, with a focus on undisturbed labour and birth, present an opportunity for training midwives and doctors in the process of physiological labour and birth, which is difficult to observe in hospital settings (McCourt et al, 2011). Midwives working in midwifery units need skills in emergency drills, for both mother (ie PROMPT [http://www.promptmaternity.org]) and baby (NLS) [https://www.resus.org.uk/information-on-courses/newborn-life-support/]. Midwives can learn from working in a community setting where social capital is enhanced by engaging local communities and the birth unit is a hub for a social model of maternity services (Walsh, 2004, 2006, 2007).

**Potential for future developments**

There is potential for many more women in the UK to be referred for care in a midwifery unit. There were 698,512 live births in England and Wales during 2013 (ONS, 2014), and estimates suggest 45% of women giving birth in NHS settings are at low risk of complications (Sandall et al, 2014). On this basis around 314, 330 women were eligible for midwifery unit care but only 89,000 in England receiving intrapatum care away from an obstetric unit (Dodwell, personal communication). As a result:
many thousands of low risk women and babies in England and Wales (225, 330) are receiving care in settings with more medicalised approach exposing them to unnecessary routine intervention.

So, there is a need to continue moving forward, growing the number of midwifery units and the number of women booking for care in them. Why is it that this appears to be so challenging? What is the form of the resistance? Or what is a winning formula for success?

McCourt and colleagues highlighted the challenges and tensions that maternity services face. Pregnancy and birth are states of transition and change; they are unpredictable and demanding. Maternity services must be flexible and responsive, while managing uncertainties and maintaining reasonable order and necessary boundaries. They need ‘resilience’ in order to meet the demands made on them. Midwifery units are caught up in this. In order to support women, to keep birth normal and to avoid high levels of medicalisation, services - and individual midwives and doctors - need to face the demands, challenges, tensions and uncertainties in a resourceful, confident and thoughtful way.

In situations where patient safety is highly important, it is easy for criticism, blame, fear and resignation to increased medicalization to take hold. Jeffcott and colleagues argue that resilience is needed to create a more positive and productive environment: ‘Resilience moves the focus away from "What went wrong?" to "Why does it go right?", that is, it moves from simplistic reactions to error making toward valuing a proactive focus on error recovery.’ (Jeffcott et al, 2009).

Following Jeffcott et al, McCourt et al found features of resilience in all four of the NHS trusts with midwifery-led services which they researched, selected as they were regarded by the Healthcare Commission as ‘better’ or ‘best’ performing. These were: commitment to learning, inter-and intra-professional trust, respect and mutual support, commitment to openness of communication, commitment to team-working, positive leadership, focus on development of clear and evidence-based guidelines, use of guidelines and protocols as intelligent systems, commitment to audit and review as an opportunity for learning, engagement of staff with audit and review at all levels, capacity to raise questions and openly air and discuss areas of dissent or disagreement. They demonstrated a focus on professional accountability and justice, rather than blame-culture or lack of professional responsibility for quality and safety, with problems understood as process and system located rather than simply individualized. While achievement of this varied in practice, all showed institutional commitment to women-centred approaches. (McCourt, et al, 2011, 2012).

In summary, this paper demonstrates that there is a strong case for increasing the capacity of midwifery unit provision in England and other parts of the UK. This would:

- offer benefit to individual women and families, and improve aspects of public health, by reducing caesarean birth rates, instrumental birth and perineal trauma, and increasing skin to skin care and breastfeeding; and
- reduce costs, or enable health services budgets to be spent more effectively.

In order to achieve this potential, the challenges and uncertainties that are inherent in maternity services need to be acknowledged and responded to in positive ways, such as
adopting the notion of ‘resilience’. Research on organizational culture in NHS trusts that are regarded as performing well reveals key themes that contribute to resilience, including commitment to learning, inter-and intra-professional trust, respect and mutual support, as well as a commitment to woman-centred care.
References


NCT (2011) NCT Policy Briefing: Midwife-led units, community maternity units and birth centres. NCT.


