An Innovative Toolkit to Support Normal Birth

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INTRODUCTION

Caesarean births are an important part of any safe maternity service. However, in light of an inability to demonstrate better outcomes for neonates,[1] a growing body of evidence about risks for the mother,[2–4] and an awareness of increased risks in subsequent pregnancies,[5,6] we are faced with a challenge to ensure that every woman has the optimal chance of a safe vaginal birth and that every caesarean section performed benefits both mother and baby and is carried out both effectively and efficiently. This article presents one strategy developed in England to address this challenge.

The caesarean section team from the National Health Service (NHS) Institute for Innovation and Improvement worked with maternity services with widely differing caesarean rates to identify behaviors and processes that contributed to lower caesarean rates while still maintaining a safe service. These findings were developed into a practical toolkit using a maturity matrix methodology to support maternity services in identifying and executing sustained service improvements. English services with lower rates of caesarean births (the high performers) demonstrated key beliefs and behaviors that accorded with the findings of other studies.[7] Maternity units are able to use the toolkit matrices to address the cultural issues underlying their clinical practices. The toolkit provides a useful service improvement resource that is likely to transfer well to maternity services outside of England.

The NHS Institute of Innovation and Improvement was formed in 2005 to support the NHS in England in improving health outcomes and to raise the quality of health care. The NHS Institute recruits experienced clinicians and experts in relevant fields to work on specific projects. England currently has a 24% caesarean section rate (range, 14%–35%), a rate that doubled between 1990 and 2006.[1] The NHS Institute was commissioned by the Department of Health in England to study the wide variations in practice and performance across the country in relation to caesarean birth. The NHS Institute appointed a team that included an obstetrician, two midwives, and a full-time service improvement manager to carry out this work.

The team identified units that had satisfactory perinatal outcomes but with caesarean rates in the upper or lower quartiles of the national range. There was at least a twofold difference in caesarean rates among maternity units across the country. In some instances, adjacent hospitals with shared catchment areas and similar levels of service differed markedly in their intervention rates. The team explored this element of variation.

Nine maternity services were selected for evaluation. These units had widely varying characteristics, including: birth rates that ranged from 2000 to 7000 births per year, inner city and rural locations, and different service configurations from midwife-led units to tertiary services.

We conducted semistructured and informal interviews and made direct observations of practice in each unit. This process involved input from clinical and managerial disciplines at all levels within the organizations and from women and families using the service. Participants were asked about specific clinical and managerial practices and about their beliefs regarding the reasons for their caesarean rates. The high performers—that is, those with consistently low caesarean rates—were asked to identify the elements critical to their success. The findings were published as *Focus On: Caesarean Section*.[1]

In order to assist maternity units in implementing changes towards lower caesarean rates, the team went on to develop *Pathways to Success: A Self-Improvement Toolkit, Focus On Normal Birth and Reducing Caesarean Section Rates*.[8] The toolkit focuses on three clinical pathways: management of first pregnancy and labor; achieving vaginal birth after caesarean section (VBAC); and management of elective caesarean section. The toolkit enables maternity care settings to assess their practices against a set of benchmarks in order to improve childbearing care. It also provides a framework to support maternity teams in understanding and changing their behavior by exploring the ''Top Ten Characteristics'' and ''Organizational Characteristics'' of institutions with low caesarean rates. The toolkit also contains practical guidance for making sustainable changes to maternity services with the use of a range of tools and ideas supplied on a CD-ROM. The toolkit was launched in 2007 in England and its impact is

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Table 1. The Top Ten Characteristics of Services Aspiring to Optimal Care

- We focus on keeping pregnancy and birth normal.
- We are a real team—we understand and respect roles and expertise.
- Our leaders are visible and vocal.
- Our guidelines are evidence-based and up to date.
- We all practice to the same guidelines—no opting out.
- We manage women's expectations and prepare them for the reality of labor.
- We are proactive in recommending VBAC and giving accurate information about risks and benefits.
- If a caesarean section is planned, the process is efficient and effective.
- We get accurate, timely, and relevant information on our performance.
- We work closely with our users and stakeholders.

VBAC = vaginal birth after caesarean.

Source: National Health Service Institute for Innovation and Improvement.[8]

currently being evaluated. It is important to realize that this improvement program is taking place in an environment where the Department of Health determines national policy on the provision of childbearing care.[9] The Top Ten Characteristics are provided in Table 1 as a resource for clinicians to assess their own practice setting in the promotion of normal birth within the context of their country and local institutions. Table 2 provides several examples of goals and performance characteristics from the first clinical pathway on first pregnancy and labor.

GUEST EDITOR'S COMMENT

The United States also has a burgeoning caesarean section rate, with an average of 32%[10] that is much higher in some institutions. There is evidence that interventions in the birth process are overused, providing minimal beneficial effect and increasing the numbers of operative births.[10] This problem has been noted by the National Institutes of Health, which has called for increased research in support of strategies to foster successful vaginal birth in first-time mothers.[11] The benchmarks contained in the *Pathways to Success: A Self-Improvement Toolkit, Focus On Normal Birth and Reducing Caesarean Section Rates* toolkit could provide one strategy for US maternity care settings to adapt in order to move toward the National Institutes of Health goal.[12] For further information from the NHS Institute for Innovation and Improvement concerning the caesarean section toolkit, please e-mail c-section@institute.nhs.uk.

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Table 2. National Health Service Clinical Pathway for First Pregnancy and Labor (Examples)

Goal	Best Performing Characteristics
Antenatal	
Women are informed about their options for the place of birth	• Each woman is informed of all options for place of birth as a real choice • There is a gradual yearly increase in uptakes • There is a continuing discussion about place of birth throughout pregnancy
We work with women to ensure they have a realistic expectation of labor, birth, and parenthood	• All midwives support and encourage the uptake of classes • The classes are well attended and led by a birth educator or midwife
We focus on keeping pregnancy and birth normal	• NSF implementation is well established. The pathway towards normal birth is actively promoted within the service • The multidisciplinary team focus is on achieving normal outcomes. We learn from each other to achieve this
There are no social inductions	• All women are offered stretch and sweep no earlier than 41 weeks and 3 days' gestation. Full discussion and information enables each woman to make a decision to await events or commence induction of labor
We manage women's expectations, and we prepare them for the reality of labor	• We do not offer caesarean section for maternal choice. We have a variety of pathways for addressing the individual needs of women with fears of childbirth including appropriate follow-up
Labor and birth	
Labor is managed using evidence-based guidelines	• Evidence-based guidelines are regularly reviewed and updated • Women are given clear information about the benefits and risks • Variations in practice are explored • All women are offered intermittent auscultation in line with NICE guidance • Electronic fetal monitoring is only used when there is a clinical indication
There is an open culture in which staff are supported and challenged in their decision-making	• There is a multidisciplinary review of care daily; all emergency caesarean sections and births with a positive outcome are discussed • There is an open and honest "no blame" culture.
Our skills drills are genuinely multidisciplinary	• All staff are involved in frequent impromptu skill drills followed by a debriefing; these are viewed positively by staff
Doctors enter the rooms of laboring women by invitation only	• Doctors are not informed of details of low-risk women • Doctors only enter a room when asked to review by a midwife
High-risk women receive team-based care to optimize the potential for normal outcomes	• There is a clearly defined intrapartum plan of care for all high-risk women. This is team based involving the midwife, obstetrician, pediatrician, and patient • All staff respect the importance of attaining a normal outcome for these women wherever possible. For example, mobility and upright positions

NICE = National Institute for Clinical Excellence in England; NSF = National Service Framework.

Adapted with permission from the National Health Service Institute for Innovation and Improvement.[8]