NHS QUALITY IMPROVEMENT SCOTLAND

An Evaluation of the
Scottish Woman Held Maternity Record
in NHS Scotland

Final Report

JOYCE CRAIG, York Health Economics Consortium (YHEC)
MARY RENFREW, Mother and Infant Research Unit (MIRU), Health Sciences
LILY LEWIS, York Health Economics Consortium (YHEC)

MARCH 2010
Executive Summary

1. INTRODUCTION

This is an evaluation of the implementation of the Scottish Woman Held Maternity Record (SWHMR) in NHS Scotland. It was commissioned by NHS Quality Improvement Scotland (NHS QIS) on behalf of the Scottish Government. The overall direction and methodology was guided by the SWHMR Steering Group which was formed in 2008, comprising representatives of maternity care from every territorial NHS board. This Group was set up by NHS QIS with the aim of ensuring the SWHMR remains fit for purpose. This evaluation should support it as it oversees the development of future versions of the record. The recommendations from this evaluation will also be considered by the Maternity Services Action Group which has a national remit for maternity services.

We wish to acknowledge the superb cooperation and support received from the maternity care community in Scotland. Over 200 people have participated in this complex evaluation and we wish to thank them for their input.

2. METHODOLOGIES AND VALIDITY OF OUTCOMES

This evaluation has combined:

- A literature review;
- Internet questionnaires for healthcare professionals and representatives of women’s groups (responses were received from 129 professionals and six women’s representatives);
- Telephone interview with 19 representatives of the midwife community, three GPs and an anesthetist, paediatrician and obstetrician;
- Five case review visits;
- Logic modeling with members of the Steering Group;
- Responses from clinical governance managers and medical directors at eight NHS boards.

The real strength of this evaluation is the consistency of the messages coming through from applying each tool. Use of multiple tools in multiple locations to reach several disciplines has ensured the responses reflect the views of those using the SWHMR across Scotland. We are satisfied that these responses give valid and robust feedback to the various users.

The exception is that the woman’s voice is muted. This is a consequence of the timelines set for the project. There was insufficient time to seek ethics approval to approach women directly.
3. FINDINGS

The findings from these approaches have been analysed across the four specific objectives of the external evaluation.

The Degree of Implementation of all Elements of the SWHMR across NHS Scotland

Most NHS boards are using the SWHMR with the exception of the neonatal record, though not completely consistently: for example, at least one maternity unit is using a hospital information system to hold the data on the maternity summary record and another is using the only using the labour and birth record for home deliveries.

Other than midwives, the main groups using the SWHMR are obstetricians, anaesthetists and GPs, although each group also use their own documentation, causing duplication of data entry. Surgeons and theatre staff do not use SWHMR, having their own documentation.

Lothian has developed an e-SWHMR using TRAK® which replicates the majority of the fields in the SWHMR and can print reports which have similar layouts to the SWHMR. Further developments are underway to improve convergence with the paper SWHMR.

The maternity summary record is not always well completed nor updated, notably at maternity units with good hospital information systems. Concerns were raised about accessing the maternity summary record particularly out of hours; this could be vital in an emergency.

The research found the major benefit to NHS staff of the SWHMR was that it is implemented across Scotland and thereby makes it easier for pregnant women to move between NHS boards and indeed for staff to transfer.

The Extent to which the SWHMR is Fit For Purpose as a Standardised Maternity Record and What Additions are Required to the Core Dataset

Evidence suggests the SWHMR has improved record keeping but needs to be supported by regular case reviews. The majority of responses valued the use of a national record in prompting consistency and uniformity of record taking and thence to a standardised approach to the provision of care. The other major benefit was that it facilitated the safe movement of women within, and across, boards and across care boundaries.

However, some maternity units are not using the SWHMR to record all clinical findings and decisions in respect of high risk women. Rather these are being managed by consultant led care groups using different documentation, with summaries only in the SWHMR.

The major issues emerging were:

- Dupliciation and repetition of data. This applies both within the SWHMR and across systems (paper and electronic). This may lead to errors in entry and thus inconsistent data and causes the records to be bulky;
- Having six separate records. Users do not understand why these are separate and resent the double entry required. Reported risks included failing to transfer important information at each of the hand-over of care points;
- Too time consuming, too much writing and inappropriate use of midwife time;
- The Labour and birth record has generated the greatest volume of criticism; common complaints include large amounts of wasted pages, but insufficient space for some births in the appropriate sections, and the partogram being too small;
- Handling and storage costs are high and the records expensive to buy.
The main improvements suggested were to combine some of the sections and use dividers to highlight individual parts, or adopt an e-SWHMR.

The main generic revisions suggested were on anti-D prescribing, screening tests, revised public health questions on alcohol, diet and exercise, better information on the second twin and third triplet and revisions to be consistent with the Keeping Childbirth Natural and Dynamic (KCND) pathway.

The Extent to which the SWHMR has improved the Quality and Safety of Care for Women

No definitive evidence answers this question since the analysis has not been done. Rather, there is a supposition that the improved record keeping will at worst not change clinical care, and at best will improve it. However, it is not clear if the SWHMR has changed clinical practice or just the records. Several potential risks, particularly around the availability of the postnatal records when preparing discharge letters, were highlighted. The absence of robust records in the hospital to enable staff to respond accurately to complaints is a major risk for a board and one which should be addressed.

The women’s representatives indicated a high level of satisfaction with the SWHMR. Seventeen percent of midwives stated that women do not find the SWHMR difficult to use. The groups identified as potentially having problems included:

- Women with chaotic lifestyles, particularly if suffering an addiction;
- Women with language difficulties;
- Women with learning difficulties;
- Those who wish their personal information to be inaccessible to others.

Suggested improvements included better explanations from the midwife to the woman of the purpose of the SWHMR, being more than ‘carrying your own records’, and better differentiation of different sections within the records themselves.

Women also participate in the SWHMR process, with our audit finding that 42% entered one or more comments in the Pregnancy record. The comments were often very short and limited to phrases such as ‘I want name to be there.’ The impression was that women are not truly empowered by the SWHMR and to become so would require more time and relationship building.

The Impact of the SWHMR on Professionals

The main impact of the SWHMR on professionals has been the benefit of having consistent, clear, national records but the penalty is the time to complete these. Other benefits noted include improved communication and encouraging multidisciplinary working.

The midwife community had plans to use the data from the SWMHR to monitor trends, produce performance statistics, and inform commissioning decisions and for clinical audit. Delivering these original objectives seems unlikely to be achieved without an e-SWHMR. Moreover, if the system was integrated with the other clinical systems then multidisciplinary working may be improved further.
4. RECOMMENDATIONS

Recommendations have been grouped by stakeholder.

Maternity Services Action Group

A key question for the Maternity Services Action Group is whether to:

a) support a *de minimus* change programme to update a few fields;
b) support a major overhaul to reduce duplication by combining some records;
c) commission some work on an e-SWHMR.

This evaluation has highlighted the extent of duplication both within the SWHMR but also across systems and within paper files. Reasons include local fixes and patches to make the SWHMR work in each locality. The scale of the duplication of entry and risks associated with inconsistent data make quite a compelling case for considering an electronic system. The case is strengthened because the longer term objectives of the SWHMR, in terms of analysing the data for management information and to support decision making, cannot be realised without an electronic system.

The NHS Lothian experience of integrating an electronic SWHMR into a NHS board information system is directly relevant. Lothian has had the benefit of introducing change, as part of a new information system with a new hospital build; this is likely to be easier than integrating an e-SWMHR into existing systems. However, not all the implementation was on a greenfield site. The system has also been installed successfully at an existing hospital, St John’s Hospital Livingston, into the offices used by community midwives and into GP practices. Factors relevant to the review could include the impact of the electronic system on staff, particularly at the booking stage, and its impact on other boards referring patients into Lothian. It may be appropriate to supplement the learning from NHS Lothian with learning from NHS Ayrshire and Arran’s introduction of the Eclipse system.

If such a study was feasible it would be appropriate to capture the impact on multi-disciplinary care groups and women. These analyses could then inform the development of a wider business case. The NHS boards should be advised on the process and timing of such decisions so they can plan accordingly. Whilst an electronic solution is being negotiated the paper record requires updating.

Supervisors of Midwives

Feedback showed the need for regular and robust audit to improve compliance. Currently the supervisors of midwives are undertaking regular reviews. If compliance is to be maintained then the effort devoted to this function may need to be enhanced with the supervisors supported by clinical audit.

NHS QIS

Professionals have valued the NHS QIS ‘Maternal History Taking’ Best Practice Statement. Further guidance on some operational aspects of the SWHMR could also be of benefit. This could contain reminders for staff on the use of flags to manage confidential information, the importance of the ‘Special Features’ boxes to highlight risks, the rules for returning records for women and babies who are delivered out of area, identify where other professional groups, particularly GPs, should sign and explain the status of the document in the various settings. It may also be possible to share good practice in promoting partnership working with women and other key professional groups.
Engagement with Royal Colleges

Robust communication and record keeping are an integral part of nursing and midwifery practice. These principles are core to providing safe and effective care and endorsed by the Royal Colleges and Nursing and Midwifery Council. All parties agree that the GP and midwife relationship is central to the delivery of safe and effective care. Some maternity units have used the SWHMR to enhance existing relationships with GPs; these good practices could be shared more widely. Greater communication with GPs, through the Royal College of General Practitioners and Scottish GP Committee, may also reduce some of the uncertainties and barriers preventing more effective information sharing between GPs and midwives.

Similarly, providing greater clarification on the use of the SWHMR through communication with bodies such as the Royal College of Obstetricians and Gynaecologists and the Royal College of Anaesthetists may be one way to encourage other health professionals in the hospital to complete the SWHMR.

Heads of Maternity Units

Heads of maternity units may wish to reassure themselves that the SWHMR has not added to clinical risk by encouraging/facilitating decision making without a full information exchange with the relevant GP. Similar reassurance should be sought that the SWHMR has not diminished the processes that ensure robust child protection arrangements are in place. Changing SWHMR to require a check box to say ‘data obtained from GP’ should be considered.

Future Research

This evaluation has identified that the midwifery community are fully engaged with the SWHMR, that other professionals have uncertainties about the process and that women’s representatives see benefit from the SWHMR. We have not explored women’s views and the changes which may be required to improve their engagement. Some suggestions have come from midwives, for example sending out the SWHMR before the initial booking appointment and asking women to complete sections at home or in clinics. Others are concerned that there is not enough time at the booking to do more than emphasise the importance of bringing the SWHMR to all appointments; messages about holistic care and empowerment are crowded out by the booking itself.

A useful project could be to identify best practice from around Scotland for engaging women and then engage in focus group work to evaluate the SWHMR from a woman’s perspective and review which tools may be useful in increasing the women’s sense of control.
Acknowledgements

Joyce Craig and Professor Mary Renfrew from York Health Economics Consortium (YHEC) and the Mother and Infant Research Unit (MIRU) of the University of York respectively, are indebted to the maternity community in Scotland for participating in this evaluation exercise. In particular we would like to thank:

a) The Heads of Midwifery and their staff who supported the case reviews at:
   - NHS Greater Glasgow & Clyde
   - NHS Lothian
   - NHS Tayside
   - NHS Highland
   - NHS Western Isles

b) The 25 people, from midwifery and other clinical disciplines who agreed to be interviewed by telephone;

c) The 135 people who took the time to complete the on-line questionnaires;

d) The Steering Group members who attended the logic modelling session;

e) Our Advisory Group members who steered the project, giving advice throughout the process from the initial draft questions to informing the recommendations;

f) The project team at NHS Quality Improvement Scotland (NHS QIS).

We hope this evaluation is of benefit to users of the records, particularly pregnant women and their babies, across the NHS boards in Scotland.

We also note many of the themes for this evaluation were identified by the multi-disciplinary Scottish Woman Held Maternity Record (SWHMR) Steering Group. Members of this Group, set up by NHS QIS to inform the on-going development of the SWHMR, have thus been key in determining the issues examined in this evaluation. We thus wish to acknowledge their role.

Fuller information on this Group is available at:

http://www.nhshealthquality.org/nhsqis/4791.html

We would also like to thank Alison McFadden from MIRU who conducted some of the interviews.

---

1 Record keeping: Guidance for nurses and midwives. Nursing and Midwifery Council July 2009