

Evaluation of the publicly-funded homebirth program in South East Sydney Illawarra Area Health Service

September 2007

Prepared for the Homebirth Steering Committee by **Professor Caroline Homer** (Centre for Midwifery, Child and Family Health, Faculty of Nursing, Midwifery and Health, University of Technology Sydney) and **Shea Caplice** (Project Midwife: St George Hospital).

TABLE OF CONTENTS

<i>ACKNOWLEDGEMENTS</i>	1
<i>EXECUTIVE SUMMARY</i>	2
<i>RECOMMENDATIONS</i>	3
<i>BACKGROUND</i>	5
<i>PLANNING AND DEVELOPMENT</i>	6
Funding	8
<i>IMPLEMENTATION</i>	8
The homebirth model of care	9
Processes for ensuring safety and quality	10
<i>EVALUATION METHODOLOGY</i>	11
<i>EVALUATION RESULTS</i>	11
Outcomes for women and babies	11
Experiences of the women	14
Experiences of the midwives	17
Experience of the organisation.....	20
<i>DISCUSSION</i>	23
Recommendations	27
<i>REFERENCES</i>	29
<i>APPENDIX A: Home Birth Information Sheet</i>	31
<i>APPENDIX B: Selection Criteria for Primary Midwives</i>	34
<i>APPENDIX C: Text for Consent Form (women)</i>	35
<i>APPENDIX D: Text for Consent Form (Support People)</i>	36
<i>APPENDIX E: Guideline - Homebirth</i>	37
<i>APPENDIX F: Guideline - Transfer to hospital</i>	39
<i>APPENDIX G: Guideline – Home visit at 36 weeks</i>	41
<i>APPENDIX H: Homebirth Project – Consumer Survey</i>	43

ACKNOWLEDGEMENTS

Thank you to the women who were prepared to participate in this innovative model of service. It was their willingness to be involved that will pave the way for other women in NSW to be able to access publicly-funded birth at home.

The vision and commitment of the midwives from the St George Birth Centre have been crucial to the implementation of this Homebirth model together with the support from the management and staff of the St George Hospital Division of Women's and Children's Health. Thank you to all the staff at St George Hospital for their dedication, enthusiasm and ongoing support.

A final acknowledgement to the Homebirth Project Steering Group who provided valuable support, guidance and advice throughout the development and implementation of the service, in particular, the consumer members that gave so generously of their time over the past four years. Thank you to all of you.

EXECUTIVE SUMMARY

A homebirth model was established at St George Hospital in 2005. This was the first publicly funded homebirth model in NSW. The model was established to address inequities in access to services for women who choose homebirth. Two years of planning was undertaken before the model was fully operational. Planning included negotiations with the NSW Health Department's professional indemnity insurer, Treasury Managed Funds (TMF). Approval to commence the model was conditional on a number of consent forms and information sheets that were subsequently developed. The model of care was implemented within the existing budget of the maternity unit with no additional funding except for initial support, the evaluation and some additional equipment.

The homebirth model operated out of the existing Birth Centre at St George Hospital. The midwives were those who were already employed in the Birth Centre. A process to ensure midwives were appropriately experienced to attend homebirths was put in place. A number of quality and safety measures were also established including case/peer review of all women who were booked with the program.

In total, 40 women booked for a homebirth with the program between September 2005 and May 2007. Of these, 14 (35%) were transferred out of the program during the antenatal period. All these transfers were appropriate. This meant, 26 women commenced labour at home with the expectation of a homebirth. Of these, 23 (88%) gave birth at home. There were three (3) intrapartum transfers – all due to slow progress in the first stage of labour. These women were transferred to hospital by private car. Two of these women subsequently underwent emergency caesarean section and one gave birth through a vacuum extraction. There were two (2) postnatal transfers, one for a postpartum haemorrhage and one for mild neonatal respiratory distress. The woman who experienced the PPH was transferred to the Delivery Suite. The baby with the mild respiratory distress was taken to the Emergency Department. The baby received oxygen therapy and was discharged home within four (4) hours.

The women reported mostly very positive experiences with the homebirth model. The most negative experiences were related to the ability of the health systems policies to accommodate their individual needs.

The experiences of the midwives and the organisation as a whole were also positive. The biggest challenge or issues were related to ongoing sustainability.

Providing the option to give birth at home within the public health system encourages pregnant women to have confidence in their ability to give birth normally without medical intervention. It also engages women in an active and involved birthing experience. Findings from this evaluation could assist with practice development models for all pregnant women throughout the maternity system and the implementation of a similar model in other Area Health Services.

RECOMMENDATIONS

A number of recommendations have been identified as a result of this evaluation. These include:

1. The publicly funded homebirth program continues from St George Hospital and is expanded to other sites within the SESIAHS and across NSW to ensure equitable access for all women.
2. A substantial position, such as a Clinical Midwifery Consultant in Practice Development, needs to be in place to provide leadership for the service. Initial support from a Project Midwife may facilitate development and implementation.
3. A Homebirth Steering Committee needs to continue to ensure that the model can develop and be sustained. It is essential that the membership is multidisciplinary and have more than one consumer representative.
4. The advertising and promotion of the service be more extensive and more widespread.
5. The processes to ensure quality and safety continue including the multidisciplinary review of guidelines and regular review of all booked homebirths.
6. The midwives working in the homebirth model need to be included in consultation processes around the development or updating of any policies that will impact on the model.
7. A commitment to ongoing workforce issues is essential. This includes exploring mechanisms for mentoring midwives to ensure this occurs on a continuous basis and new midwives are given the opportunity to provide the service. Resources must be available for training (homebirth workshops, suturing instruction, team building, ALSO courses and credentialling) for all midwives who work in midwifery continuity care, in particular, the homebirth model.

8. The best way to maintain and recruit midwives to work in the homebirth model needs to be explored. This may include contracting locally practising homebirth midwives to provide the service as occurs in the Albany Midwifery Group Practice in the UK.
9. These models should be a recognised option for women and integrated into existing maternity service provision. Support from managers, obstetricians, general practitioners and the ambulance service is essential.
10. Ongoing audit and evaluation needs to occur including clinical outcome data and the experiences of women and midwives. Streamlining of this data collection process needs to be examined to ensure that the current Obstetrix database can easily measure the outcomes of women booked for homebirth; antenatal transfers; intrapartum and postpartum transfers; and other relevant outcomes.

BACKGROUND

The World Health Organization (WHO) recognises midwives as “the most appropriate and cost effective type of health care provider to be assigned to the care of women in normal pregnancy and birth, including the risk assessment and the recognition of complications” (World Health Organisation, 1996). Studies and reviews, both overseas and in Australia, have shown that there is a need to change the way in which maternity services are provided to ensure that they were responsive to the needs of women (Audit Commission, 1998; Department of Health, 1998; Department of Health, 2004; Department of Health Expert Maternity Group, 1993; NSW Health, 2000b; Senate Community Affairs References Committee, 1999). Access to midwifery continuity of care and planned homebirth services have been strategies that have been recommended in a number of these reports.

While appropriately planned, homebirth has been demonstrated both overseas and in Australia, to be a safe option for a carefully selected group of women (Ackermann-Leibrich et al., 1996; Bastian, Keirse, & Lancaster, 1998; Chamberlain, Wraight, & Crowley, 1997; Crotty, Ramsay, Smart, & Chan, 1990; Gulbransen, Hilton, & McKay, 1997; Johnson & Daviss, 2005; Murphy & Fullerton, 1998; Wiegers, Keirse, & van der Zee, 1996; Woodcock, Read, Moore, Stanley, & Bower, 1990). The development of community-based midwifery programs, which incorporate homebirth options in a publicly funded healthcare system, have been successfully implemented in both Western Australia (Thiele & Thorogood, 1997) and South Australia (Nixon, Bryne, & Church, 2003) with safe outcomes for both mothers and babies and high levels of satisfaction for women and midwives.

As yet there have not been any community-based midwifery care programs incorporating homebirth implemented within the public health system in New South Wales (NSW). This project was as a result of an identified need to improve access to homebirth services, both for local women and for midwives.

This report provides a descriptive, non-comparative evaluation of the first 18 months of the St George Hospital Program. The evaluation is limited by the small numbers of women who accessed the program. Nonetheless, it provides useful information on the first publicly-funded homebirth survive in NSW.

PLANNING AND DEVELOPMENT

Planning for the homebirth model at St George Hospital (then part of the South East Sydney Area Health Service) began in 2003.

During the planning process, policy documents from NSW Health were used to guide the development. The policy document released in 2000 by NSW Health, the *NSW Framework for Maternity Services* (NSW Health, 2000b), stated that “NSW Health acknowledges that women have the right to choose the place of birth and it is recognised that some women will choose homebirth” (page 10). It added that ‘Area Health Services develop appropriate policies and standards of care to minimise risk to mother and baby in the event of unforeseen complications requiring transfer to hospital’ (page 10). Subsequent to the release of the *Framework* (NSW Health, 2000b), a review of the Homebirth Policy circular (NSW Health, 2000a) was undertaken. Subsequently, some time after the implementation of the homebirth model at St George Hospital, a Policy Directive on homebirth was released by NSW Health (NSW Health, 2005b). When this was released in 2005, the Homebirth Steering Committee ensured that the St George Hospital Homebirth Model fulfilled the requirements in the Policy Directive.

In early 2003, a Homebirth Development Committee was formed to develop a publicly-funded homebirth model. The committee included representatives from all three hospitals in the Area Health Service at the time (St George Hospital, The Royal Hospital for Women and Sutherland Hospital) and included midwifery, medical and consumer representatives. Midwives working in the caseload model in the Birth Centre where the homebirth model was based were also members of the Committee.

In June 2003, a request was made to the NSW Health Department in relation to the provision of professional indemnity insurance coverage for the proposed model of care from the NSW Health Department’s insurer, Treasury Managed Funds (TMF). The model proposed utilising employed midwives at St George Hospital. Due to the existing caseload model of midwifery care successfully operating out of the St George Birth Centre, St George Hospital was chosen as the site for the first Homebirth Program with the expectation that the service would be extended to other sites within the Area Health Service.

The advice received from the Legal Branch at NSW Health in July 2003, was that “TMF cover would be available for staff employed midwives at St George Hospital subject to:

1. Due to the novel aspects of the Program, the midwives involved will need to keep detailed records of the births (as if they were completing the usual inpatient notes and charts)
2. If not already part of the Program, a prior consultation between the midwife and any other person (other than the mother) who was intending to be present during the birth, so that the midwives have an opportunity to meet those who will be involved and delineate their roles for the delivery
3. That the patient's home be examined prior to the birth to ensure the midwives have an appropriate and safe work environment for the future birth and any deficiencies attended to by the patient prior to the midwife agreeing to a homebirth.
4. The provision of a special and specific consent form. A draft is to be referred to the Legal Branch for review.
5. In addition to the mother's consent form, the mother and any other persons who will be present at the birth should sign a document acknowledging and accepting who will be in attendance and what the roles of support person(s) will be during the birth. This document may require support persons to agree to comply with certain conditions. Drafts are to be referred to Legal Branch for review."

The Homebirth Development Committee considered all these requirements and wrote back to the Legal Branch assuring that the first three conditions were met and supplying copies of the draft documents as required.

Point 1 was met as the midwives completed exactly the same written and electronic document for homebirths as for hospital births. Points 2 and 3 were met by ensuring a 36 week home visit was part of the model of care. At this visit, those support people whom the woman intends to be at the birth are asked to be present to enable a discussion about the labour and birth and to clarify and delineate roles. This is also an opportunity to ensure that the home is a safe environment for midwives. The guidelines for home visiting, used through the Families First program, were used to direct the assessment of a safe environment. Points 4 and 5 were met through the development of a number of documents. These were:

- Homebirth Information Sheet – Choosing to give birth at home (Appendix A)
- Selection criteria and mentoring process for midwives (Appendix B)
- Consent forms for women and their support people (Appendix C and D)

Whilst the NSW Health Department's Legal Branch acknowledged that the consent forms will have little legal effect they serve to:

1. “Raise the woman’s awareness that transfer may be necessary, and encourage her to accept the advice of her midwife
2. Act as a screening mechanism for the homebirth program. If the woman is not prepared to accept these conditions, she may not be accepted into the program, as she may be a potentially “high risk and difficult patient” (quote from the Legal Branch letter, 2004).

These documents took some time to develop through a consultative process with the Development Committee and broader discussion. The draft documents were presented to the Legal Branch in May 2004 and after some discussion, were accepted in late 2004. In March 2005, the Minister for Health released a News Release announced the publicly funded homebirth at St George – a first for NSW (Minister of Health NSW, 2005).

Funding

In late 2004, the Homebirth Development Committee submitted a proposal to the Area Health Service for funding to support the development and evaluation of the model. The Area Health Service contributed the salary of a part time Clinical Midwifery Consultant for Project Development for a two year period and a small lump sum to purchase additional equipment for attending homebirths. Subsequently, no additional funding was available for additional training, wages for mentor midwives on call or promotion.

The model of care was implemented within the existing budget of the maternity unit.

IMPLEMENTATION

In early 2005, the Homebirth Steering Committee evolved from the Homebirth Development Committee. The Homebirth Steering Committee was chaired by the Project Midwife who was appointed as a result of the funding application. The Homebirth Steering Committee met monthly.

The St George Homebirth Program commenced in 2005 with the first birth occurring in November 2005. Only the women booking to the Birth Centre at St George were given the option of a homebirth as the service was provided within a caseload midwifery model which was already operating out of the Birth Centre. This severely limited access as the Birth Centre bookings filled very quickly and often women were on a waiting list. Approximately 20

women over the 18 month period were declined booking with the homebirth service as they lived well outside the area designated for St George Hospital.

The homebirth model of care

The model of care was defined in the initial proposal and subsequently evolved over two years of planning. The essential elements of the model of care are detailed below:

- A small group of registered midwives working in the St George Hospital Birth Centre each provide continuity of care for a pre-determined number of women per year and these midwives provide the homebirth service.
- Each woman is allocated a primary midwife. Each midwife has a backup midwife to provide support. The backup midwife conducts at least one antenatal visit with the woman, thus ensuring that she always has a known midwife available.
- The *Selection Criteria for Primary Midwives Working in Homebirth Models* was developed and is outlined in Appendix B.
- The criteria for booking, consultation and referral are determined according to the *Australian College of Midwives Midwifery Guidelines for Consultation and Referral* (ACMI, 2004)
- This model is described to women who meet the eligibility criteria when they book for maternity care and the information sheet *Choosing to Give Birth at Home* (Appendix A) is provided
- The woman signs a consent form for the homebirth service during her pregnancy (Appendix C).
- An obstetrician reviews the clinical records of all women wishing to have a homebirth and acts as a referral source for the midwives.
- Antenatal care is provided in the Birth Centre and in the community.
- At 36 weeks gestation, a visit is conducted in the woman's home with her support people present to discuss the labour, birth and postnatal period. A plan for the birth and postnatal period is developed at this meeting and recorded in the woman's clinical records. The woman's home is reviewed to ensure that the midwives will have a safe environment in which to practise. Support people are asked to read the information sheet and sign a consent form (Appendix D).
- Intrapartum care is provided in the woman's home, Birth Centre, Delivery Suite or Operating Theatre depending on the woman's needs. At a homebirth, two midwives are in attendance.
- Any medical consultations are conducted in hospital.

- If transfer to hospital for birth occurs, postnatal care is provided by both the staff on the postnatal ward and the primary midwife. Following discharge from hospital, the primary midwife continues to provide care at home.
- The primary midwives work together to provide mentoring, backup and support for each other. There is a mentoring program established for all midwives working in homebirth services.
- The primary midwives work within the policies and protocols of the St George Hospital. The same documentation standards and criteria are applied to birth at home as currently exists for birth in hospital.

Midwives accepted women on the program if they were also booked with the Birth Centre and were usually within their own caseload. There were times when midwives reallocated women to match homebirth requests with primary midwives who could attend homebirths.

Processes for ensuring safety and quality

A number of initial and ongoing strategies were utilised to ensure that the model of care provided a high quality and safe service. These included:

- Homebirth, Homebirth Transfer and 36 week Home Visit Clinical Guidelines were developed (Appendix E, F and G);
- Criteria for primary midwives and mentoring by experienced homebirth midwives (Appendix B);
- Midwives undergo the NSW credentialing process (NSW Health, 2005a) within 12 months of commencing working in the model;
- Women are classified according to the *Australian College of Midwives Guidelines for Consultation and Referral* (2004). In addition the medical record of each woman booked for a homebirth is reviewed and signed by the back up obstetrician;
- Two midwives attend each homebirth;
- A quarterly case review of all booked homebirths was conducted by a multidisciplinary group. This group included midwives, managers, obstetricians, consumers and academics;
- Meetings and regular communication with the area Ambulance Liaison Officer;
- Standard incident reporting using NSW Health's IMMS system; and,
- Standard complaint processes managed through the management of the St George and Sutherland Hospital Network and the AHS.

EVALUATION METHODOLOGY

The existing *Obstet/Obstetrix Database* was used to collect data on all women who formally booked for a homebirth. The outcomes were entered into an Excel database and analysed using descriptive statistics.

Women who were booked for a homebirth were asked to complete a questionnaire regarding their experiences of birthing at home and their satisfaction with the quality of care received and services provided by the St George Homebirth Program. This was mailed to them when they were 6-8 weeks postpartum. The questionnaire consisted of seven (7) questions exploring the reasons why they chose to have a homebirth; where they actually had their baby; what their experience was and how they felt about it; the midwifery care received; the information provided during pregnancy, birth and afterwards; and whether they would choose the same care again. The questionnaire was comprised of qualitative open ended questions allowing for women to provide in-depth explanations, descriptions and comments regarding their, feelings and satisfaction levels. The questionnaires were returned anonymously to the Project Midwife who undertook a content analysis.

The experiences of midwives, managers and obstetricians were collected at two time points – the first in September 2005 prior to the first birth, and the second in May 2007. Focus groups and one to one interviews were used to collect the data. These were conducted by an external researcher. The interviews were either tape recorded and transcribed, or notes were taken. A content analysis of these data was undertaken.

EVALUATION RESULTS

The results of the evaluation are presented in the following sections: clinical outcomes for women and babies; experiences of women; experiences of the midwives; and, experiences of the organisation.

Outcomes for women and babies

In total, 40 women booked for a homebirth with the program between September 2005 and May 2007. Of these, 14 (35%) were transferred out of the program during the antenatal period and are considered to be ‘antenatal cancellations’. The clinical records of all of these women were reviewed during the peer review process and they found to be appropriate cancellations. The reasons for antenatal cancellations are in Table 1.

Table 1: Reason for antenatal cancellation

Reason for antenatal cancellation	Number of women
Prolonged spontaneous rupture of membranes at term – not in labour	3
Personal decision – changed her mind	3
Group B Streptococcus (GBS) on swab or urine	2
Induction of labour required	2
Placenta previa diagnosed	1
No staff to attend homebirth	1
Preterm labour (28 weeks)	1
Suspected intrauterine growth restriction at term	1
Total	14

Nine of these 14 women were cancelled at term (37-42 weeks gestation).

Of the 14 women who were antenatal cancellations, 12 went on to have normal births (six of these were in the Birth Centre at St George Hospital and 2 at home with independent midwives). Two women had a caesarean section – one elective (placenta previa) and one emergency (prolonged labour). All babies and mothers were healthy.

This meant that 26 women commenced labour at home with the expectation of a homebirth. Of these, 23 (88%) gave birth at home. There were three (3) intrapartum transfers – all due to slow progress in the first stage of labour. These women were transferred to hospital by private car. Two of these women subsequently underwent an emergency caesarean section and one had a vacuum extraction.

There were two (2) postnatal transfers – one due to a postpartum haemorrhage (PPH) and the other as the baby was experiencing mild respiratory distress (grunting). These women and babies were transferred by ambulance. The ambulance quickly responded in both instances (within 8 minutes). The woman who experienced the PPH was transferred to the Delivery Suite and reviewed by an obstetric registrar within 30 minutes of arrival. The baby with the mild respiratory distress was taken to the Emergency Department. The baby received oxygen therapy and was discharged home within four (4) hours.

Four (4) women gave birth at home before the midwife arrived. The timing ranged from 3 to 40 minutes before the midwife arrived. All these births have been reviewed during the case

review and the contact and arrival times were found to be appropriate and these unattended births were unavoidable.

Table 2 below presents the outcomes for all women who started labour at home with the expectation of a homebirth (n=26).

Table 2: Outcomes for women and babies who were planned homebirths at the onset of labour

	N=26	%*
Age (mean)	31 years	
Gestation at birth (mean)	40 weeks	
Primiparous	9	35
Place of birth		
▪ Hospital - intrapartum transfer	3	12
▪ Homebirth	23	88
Postpartum transfer	2	8
Mode of birth		
▪ Normal birth	21	81
▪ Caesarean section	2	8
▪ Vacuum extraction	1	4
Waterbirth	9	35
Perineal trauma		
▪ Intact	13	50
▪ 1st degree tear	2	8
▪ 2nd degree tear	8	31
▪ Episiotomy	1	4
▪ Not applicable (CS)	2	8
Sutured first or 2nd degree tears	1	10 (of the relevant tears)
Birth weight (Mean)	3700gms	
Apgar score 9 or 10 at 5 min	26	100

*Due to rounding up or down – some percentages may not equal 100

The length of hospital stay for the five (5) women who were transferred to hospital ranged from 4 hours (baby with mild respiratory distress) to six (6) days (emergency caesarean section). The other three women had a hospital stay of 1-2 days.

Almost all women (25/26) received postnatal community midwifery visits. On average, each woman received 4.3 visits (range 2-9). On average, women were discharged from the program on Day 10 postnatally (range Day 3-20).

One woman was admitted/readmitted to hospital. She developed a febrile illness at day 6 and was admitted to hospital for intravenous antibiotic treatment. She recovered quickly and returned home. She was a multiparous woman who had an uncomplicated normal birth at home. None of the babies were admitted or readmitted.

Five midwives were the primary care providers for the women who started labour expecting a homebirth. Of the 26 women who started labour expecting a homebirth, 22 (85%) of them had their primary midwife in attendance at the time of the birth.

At least two midwives attended each homebirth (sometimes this was more than 2 due to mentoring of new midwives). The primary midwife attended for an average of 4.75 hours (range 1-12 hours) with the second midwife attending for an average of 3.75 hours (range 40 min to 11 hours). Overall, the midwife time at each homebirth was 8 hours.

Experiences of the women

Questionnaires (Appendix H) were mailed to 40 women who had booked for a homebirth through the St George Hospital Birth Centre and 28 (70%) questionnaires were returned. The majority of women in the sample were aged between 30-40 years and included 19 multiparous and 8 primiparous women. Of the respondents, 17 had a homebirth with the St George Homebirth Program. Four women had their babies through caesarean section, three gave birth at the Birth Centre and two gave birth in the Delivery Suite.

Women were asked seven open-ended questions. Most respondents filled all the available space on the page with comments. It was clearly important for them to tell their story.

Women selected a variety of reasons for electing to give birth at home over giving birth at the Birth Centre. Reasons for selecting a homebirth included giving birth in their own environment would provide more privacy and comfort which contributed to feeling more relaxed and in control; wanting to increase the involvement of partner and other children and not to disrupt the family; supported the philosophy of birth as normal and decreased the likelihood of intervention; previous births had been uneventful and having had some positive experience with homebirths in the past.

Women were asked to describe their experience. Most women who gave birth at home reported their experience as extremely positive: *“straight forward labour, great, amazing, comfortable, fantastic, relaxing”* and that they *“felt safe with the excellent midwives”*. Three women who reported their babies had arrived prior to the midwife arriving still described their experiences as *“positive, enjoyable”* and *“happy”* with one woman saying *“I felt bad for not calling the midwives earlier”*.

One woman was cancelled from the homebirth program after having spontaneous rupture of membranes for more than 18 hours and gave birth on route to hospital. Of the six women who gave birth in the Delivery Suite or by caesarean section, two women were transferred due to lack of progress at home, one woman was cancelled due to placenta praevia being diagnosed, one woman was cancelled due to ruptured membranes greater than 18 hours and the other two did not give reasons for their outcomes. Overall these women reported their experiences as positive:

“The caesarean was a disappointment but necessary. We did manage to gain a sense of control with some help from the midwives”

“Even though I gave birth in the delivery suite I feel like I had a homebirth experience”.

One woman reported some dissatisfaction with the homebirth program guidelines: *“I constantly fell outside the guidelines of the program and felt I should have investigated further before I booked with the program”*. Another woman attached a copy of a two page letter she had sent to the hospital to her questionnaire. The letter described her experience of being transferred from home to hospital and her subsequent caesarean section. She describes the care at home and from her midwives as being very thoughtful and professional but complained about the care she received from the anaesthetist and nurses in the operating theatre and in the recovery ward in the hospital.

Women were asked to describe their feelings about their experience. Again it was overwhelmingly positive: *“happy, great, proud of myself, emotional, so empowering, could not have been better; I loved being at home with no separation from my partner and I loved going to sleep in my own bed afterwards; I could not have wished for a better, safer, more comfortable and loving birth”*.

A few women reported feeling a bit apprehensive and nervous about the homebirth because it was new. The woman who gave birth on route to hospital responded saying that she felt a

little annoyed that the protocol required that she come into hospital but overall was still happy with her experience.

The women who had not given birth at home still felt happy about their experience with particular reference to the fact that they felt in control and part of the decision-making process. One woman felt disappointed that the decision to give birth at home had been taken away from her but described it as a “*positive experience*” as she still gave birth at the Birth Centre with the midwife she knew.

Women were asked to comment on the midwifery care received. Most women rated the midwives as:

“excellent.; amazing; wonderful; respectful; reassuring; compassionate”

“they were down to earth, easy going, loving, kind, caring and most of all human”

“the midwife was very caring and made my birth very personal my family think the world of her”

“it was very good to be able to build a relationship with two people who looked after me during the pregnancy and the birth, there was continuity of care and I did not feel like I was being looked after by strangers but more like by friends”

“they protected me from intervention I am sure I would have had without their support”

Only two negative comments were made: *“the midwives appeared to be overworked”* and *“the care was reasonable but I would have liked more midwife presence in labour and in the ward afterwards”*.

When asked whether they were given appropriate information and control throughout their pregnancy, birth and afterwards all the respondents responded in the affirmative. The comments include:

“I always felt my wishes were respected”

“I loved the philosophy of the midwives who ensured that I knew I was in control”

“when I had any problems they were taken very seriously and acted upon instantly”

“I felt very supported to express my wishes and to discuss options”

Two women suggested: *“I would like more info on pools and setting up for a water birth at home; I felt the homebirth criteria was very strict”* and *“info given on discharge regarding GP etc would be better in writing as you do not remember it all when you are still fuzzy after the birth”*.

Nearly all the respondents indicated that they would choose the same care again if they were to have another baby. Of the three women that responded in the negative, two reported that they had given birth by caesarean section and subsequently would not choose homebirth next time. One woman commented: *“I would choose the midwives but not the program. I would love to birth naturally at home in our own time and not have hospital protocol calling the shots”*.

Some of the comments from women who would choose the same care again include:

“reassuring to know that you are backed up by the hospital system if needed”

“the interruptions, the unfamiliar environment, the separation from family, the waiting for staff to help – why would I choose that over just staying in the comfort of my own home and having the staff come to me”

“the homebirth experience gave me control. I was comfortable in my own home and my children welcomed their brother into the world and their home”

“It’s free - There is no place like home!”

Experiences of the midwives

The midwives working in the Birth Centre (who would be the identified midwives on the homebirth program) were interviewed in a focus group in September 2005 prior to the first birth and again in May 2007.

Before the service started

Three midwives attended the first focus group. The midwives reported being pleased to have the opportunity to provide publicly-funded homebirth. They felt that this model would provide women with access to a free homebirth service. For themselves, they felt that the model would provide an opportunity to provide homebirth services and still have the benefits of stable employment.

Midwives were asked to identify the proposed impacts of the model on themselves. They felt it could entail *“more hours”* as more of the visits would be conducted at home and two midwives would attend each birth. They also recognised that as they were used to managing a caseload model so, for the most part, the hours of work would not be different.

The midwives identified that allocating the women who requested homebirth to primary midwives might be challenging as not all midwives in the Birth Centre could initially provide the service. They recognised that it would be logistically challenging to re-arrange primary midwife bookings if a woman decided during her pregnancy that she wanted a homebirth. This would be easier if a woman identified at her first 'booking' visit that she wanted a homebirth as a suitable midwife could be allocated.

The midwives reported that they were preparing themselves to be able to provide homebirth care. One midwife said "*it [the homebirth model] has made me stretch myself and do skills like cannulation and suturing ... the model has forced us to get our skills up.*" They felt that the model would require more responsibility and would also provide a higher level of autonomy.

The midwives expressed that they did not have direct fears about the labour and births at home but were more worried about the wider political impact of the model. They recognised that as this was a new model there was a high degree of scrutiny and they felt that they "*would be watched*".

The midwives also raised the issue of being on call – both for their usual Birth Centre caseload as well as the homebirth women. Most said that they had found caseload more difficult in the beginning than they had thought and wanted others in the unit to understand the challenges in relation to being on call, especially now as it was for homebirths as well.

When the homebirth model was initially established there was a caseload model and a team model operating in the Birth Centre. The caseload midwives were the first group who would attend the homebirths. This group identified that there was a possibility of separation and "elitism" between themselves and the team in the Birth Centre. They were keen for this not to impact negatively but could see that it was possible.

The need for organisational support was raised in the group. The support needed was from their managers (direct as well as more senior), obstetricians, other midwives and junior medical staff. The midwives identified that it essential to have a line manager who understood the model including the need for flexibility with being on call and provided leadership and a buffer from wider challenges.

After 18 months

Six midwives attended the second focus group which was conducted after the program had been in operation for 18 months. Four of these had been providing homebirth services and two were in the process of being mentored into this role. The midwives were mostly very positive about the program and all were keen to be able to provide a homebirth service. They reported feeling well supported by the organisation including the managers and the obstetricians.

The mostly positive comments were related to actually being present at homebirths. Midwives reported that they were struck with the family atmosphere that arose during a homebirth noting that it made the birth a social, rather than medical, event. They recognised that as midwives they were guests in the home and this impacted on the way they behaved. They also noticed that there was minimal interruption with normal labour and birth and how they found that to be physiologically beneficial.

The process of discussing homebirth with women had evolved over the past 18 months. Midwives reported that they were now starting to talk with more women through pregnancy about the homebirth. More women were expressing that they would like to decide close to the labour and even during the labour rather than at the first visit. Midwives were starting to manage this by ensuring that the policy for a potential homebirth was followed for these women (eg consent forms, medical 'clearance') so that women could choose in labour.

There were a number of challenges raised by the midwives. The first related to the clinical guidelines in relation to screening for Group B Streptococcus. The guidelines for intravenous antibiotics in labour for women who have had a previous GBS positive swab mean that these women have to be cancelled from the homebirth program even they do not have any other risk factors. The policy of neonatal observation in hospital for 24 hours in women with a past positive GBS result also means that these women have to come to hospital. The midwives noted that women could be shown how to monitor their baby's temperature and the midwives are on call for home visits which would mean the baby would not need to be admitted to hospital.

The second challenge was related to the ongoing mentoring of midwives so that the number who could provide homebirth was larger and more sustainable. Currently the program only has two midwives (two on maternity leave and one on 12 months leave) who can provide homebirth. This means that the program has to limit its numbers of women but conversely, more women would mean a greater opportunity to mentor more midwives. Ongoing

sustainability is therefore threatened by a lack of available workforce. A Project Midwife was appointed to assist with the development of the model and early mentoring of midwives. This role however was not structured to actually provide on call (hands on) mentoring at homebirths and was limited to managing operational issues and supporting the evaluation.

The midwives felt the need for a more work around team building, reflection on philosophy and formal processes of debriefing. The midwives meet weekly but often this is to discuss operational issues and processes. The team building workshops that were conducted in the beginning of the caseload model in the Birth Centre were highly valued.

Experience of the organisation

Midwifery managers, midwifery leaders (midwife consultants, educators) and obstetricians were interviewed before the homebirth service commenced and again at 18 months. The section below described the experience at these two time points.

Before the service started

Seven managers and midwifery leaders were involved in the first focus group. The senior midwifery manager was also interviewed and her responses have been included in the analysis that follows.

The response to the notion of a homebirth service was overwhelmingly positive. They felt that the homebirth service was an extension of the Birth Centre which had been successfully operating for 15 years. The managers felt that the long time spent in planning the service meant that many of their concerns had been addressed.

The managers and leaders highlighted a number of challenges although that reflected that these had been addressed in the planning phase. The challenges included managing emergency transfers and clinical decision making; effective liaison with the ambulance service; and, ensuring that the midwives underwent credentialling under the *NSW Health Credentialling Framework*. They felt confident that the midwives providing the service were well known in the maternity unit and would liaise effectively with the staff in all areas where necessary. The managers were concerned that the general midwifery and nursing staff were unaware of the service that was about to start and felt that more communication and promotion could have occurred. There were concerns expressed about the cost of providing such a service as two midwives will be required to attend each birth.

The managers and leaders recognised that a considerable amount of work was needed before any homebirth service is established. This includes:

- Policies and guidelines
- Equipment
- Obstetric support
- Assurance from NSW Health that professional indemnity insurance will be provided
- Midwives having up to date emergency skills
- Effective communication and feedback processes
- Effective systems to manage the paperwork and data entry

Three obstetricians were interviewed before the service started. One expressed pleasure in being able to be involved in providing such a service and “*relief that the system had some sense*”. One expressed surprise that the service was about to start as he had not been involved in any communication about it. He reported not knowing about the service until he saw it reported in the media. Another felt that he did not have enough information on the service and needed more communication.

The obstetricians expressed that there were limited benefits from their perspective but probably also limited implications. One suggested that there was likely to be minimal impact on the maternity unit as a whole.

The obstetricians felt that all new models of care, particularly midwifery-led models, were open to scrutiny. They also were aware of the need for long term sustainability – the service or model had to survive beyond the initial enthusiastic phase. Midwives needed to be prepared to follow the policies and guidelines and not go beyond their scope of practice.

One felt that homebirth typified the philosophical differences between the medical and midwifery models and that the obstetric profession as a whole would not support it. This obstetrician could not see that homebirth would ever “get through” even though he recognised that this was what some women wanted. His main concerns were related to midwives who would not follow the guidelines. He raised some strategies to reduce the potential risks. These included the need for strong guidelines, ongoing formal review of the care of all women who booked for homebirth and a review of the processes for consultation and referral. He indicated that the service had to be “squeaky clean and follow things to the letter as people will be watching”.

One of the obstetricians expressed concern that the homebirth service would “take midwives out of the system”. The impact on the workforce was an issue. He also felt that the planning for this service seemed to have been thorough and the processes were well set up that this was a good indication that all would go well.

After 18 months

A focus group and interviews with five maternity service managers and an obstetrician and observations of the Homebirth Steering Committee meetings were used to analyse the experience on the organisation after 18 months of operation.

The managers were very supportive of the service and were committed to making it a long term mainstream option at the hospital. They felt that the service seemed well accepted amongst the staff and that the transfers had been managed well by both the homebirth and hospital-based midwives. They did express a number of concerns mostly about the sustainability of the service and the channels of communication. The managers also expressed that “*a lot of energy was going into a small project that catered for a small group of women*”. The circular nature of the sustainability problem was expressed – “*need to have more homebirths to give more midwives the experience but we don’t have the midwives to take on more homebirth women*”. It was identified that the program had the potential to fail in terms of sustainability due to a lack of mentors.

Some of the managers stated that they would have liked more ongoing information about the project and to see it have a higher profile within the unit. It was felt that midwives on the postnatal ward and the special care nursery, in particular, had a very limited understanding about the service and often only heard about the more challenging issues. Additional communication and inservice education sessions would have been valued by the midwives. These sessions might have also provided feedback to the managers who are not part of the Homebirth Steering Committee and felt that they lacked information.

The considerable organisational change that has occurred within the wider maternity unit over the past 18 months was also thought to have contributed to a lack of clarity and information. The Area Health Service and the hospitals had undergone substantial restructuring over the time period. Many of the leadership roles in the maternity unit were held by people who were in acting positions and the uncertainty around the re-structure was a contributing factor.

The need for mentor midwives was highlighted. This role could support midwives in their first year of practice as well as midwives in other models who were keen to work in the Birth Centre and attend homebirths. It was recognised that a framework to support these midwives was essential for ongoing sustainability of all the continuity models, not only homebirth. One of the managers said “*we need to be more visionary, more creative and look at a new approach to keep it all going.*” The managers also expressed an interest in expanding the service across the Network (St George and Sutherland Hospitals) as well as to other hospitals in the Area Health Service (Wollongong Hospital and the Royal Hospital for Women).

One of the obstetricians commented that the 18 months had been “*remarkably uneventful*”. He felt that the trust and respect between the midwives and the obstetricians helped make the service successful. He said, “*we know each other, they know that I am not out to prevent things happening and we have to work together*”. He did not feel any resistance or antagonism from the midwives and enjoyed being part of the program.

The peer review sessions were particularly commented on. They were felt to work really well once the structure and purpose was clarified. It was particularly important from the perspective of the obstetrician, that the midwives were present and they were all able to discuss the situations and decisions. The peer review sessions were not about the obstetrician reviewing the cases, there were about the team discussing what happened and negotiating the boundaries of practice. It was felt that the peer review sessions “*gave midwives an opportunity to ask questions, discuss practices and decisions and learn in real time based on real events.*” Discussing issues has also helped clarify policies and protocols in relation to the homebirth service and has also facilitated collaboration with other areas, for example the paediatric service and the Emergency Department.

DISCUSSION

This report outlines an evaluation of the first 18 months of the St George Homebirth Project. The model of care is unique as it is the first publicly-funded homebirth program in NSW and the first homebirth program operating out of an acute care service in Australia. There are only two other publicly-funded homebirth models in Australia. In Western Australia, the Community Midwifery Program (CMP) was established in Fremantle in 1996 as a pilot program with funding from Commonwealth Alternative Birthing Services. In South Australia, the Northern Women’s Community Midwifery Program was established in 1998 and offers home and hospital birth to women from a particularly disadvantaged area of Adelaide. Both

these models have had descriptive evaluations which have demonstrated a positive outcomes for women and midwives (Nixon, Bryne, & Church, 2003; Thiele & Thorogood, 1997).

The evaluation of the St George Homebirth Project is similarly descriptive and non-comparative. As such, generalisations about the safety of such a model cannot be drawn. Nonetheless, the evaluation demonstrates that the model meets the needs of most of the women and midwives who were involved in it and is valued as a model of care within the organisation.

The evaluation includes only a small number of births however, for the most part, there was little evidence of negative outcomes. The cancellation rate of all women who booked for a homebirth was 35%. The examination of the cancellations showed that they were all acceptable. It is unfortunate that one woman had to cancel because there were no midwives to attend her homebirth. This is reflective of the small number of midwives at St George Hospital who are, at this point in time, able to provide a homebirth service.

It seems that the women were screened appropriately and that planning for each of the homebirths was evident. These are essential for an effective service as there is evidence that planned homebirths are safer than unplanned homebirths. A retrospective review of 7,002 homebirths in Australia from 1985-1990 concluded that homebirth was a safe option for women with no complications, but was inadvisable for women deemed to be at 'high risk' (Bastian, Keirse, & Lancaster, 1998). One of the key messages from this research was that: "while homebirth for low risk women can compare favourably with hospital birth, high risk homebirth is inadvisable and experimental" (p 384). In the UK, The National Birthday Trust prospectively compared women who at 37 weeks gestation were planning to give birth at home with women who were planning a hospital birth (Chamberlain, Wraight, & Crowley, 1997). The overall perinatal outcomes for women who planned to give birth at home, and subsequently did so, were excellent. The perinatal mortality rate was significantly higher in women with unplanned homebirths than in those with planned homebirths. This research and subsequent work by this group (Chamberlain, Wraight, & Crowley, 1999) suggest that a woman who is appropriately selected and screened for birth at home is putting herself and her baby at no greater risk than a women of similar risk profile who books and births in hospital. Other studies have examined perinatal outcomes related to planned homebirth. One reviewed the outcomes of women who gave birth between 1981-1994 (Northern Region Perinatal Mortality Survey Coordinating Group, 1996). The perinatal mortality among women booked for a homebirth (14 deaths in 2,888 births) was less than half that among all women in the region. A larger number of perinatal deaths at home (134 deaths in 3,466 births) were

recorded in women who were booked for a hospital birth or had made no arrangements to have professional help during labour, that is, unplanned and unsupported homebirth.

Of the 26 women who commenced labour at home at the St George Homebirth Program, five were transferred, either during labour (n=3) or postnatally (n=2). This gives an overall transfer rate of 19% which should be interpreted with caution since the numbers are so small. This is slightly higher than the most recent large study of homebirths in the USA which reported an intrapartum and postpartum transfer rate of 12% (Johnson & Daviss, 2005). The rate of normal birth at home in the 26 women who commenced labour at home was 88% which is in line with most expectations in relation to low risk women and similar to data from this birth centre reported previously (Homer et al., 2000). The rate of waterbirth was significant with more than one third of women choosing to give birth in this way. Water is known to be an effective means pain relief in labour and is chosen by many women if they have the opportunity (Cluett, Nikodem, McCandlish, & Burns, 2006).

The perineal trauma requires discussion. Half of the women who had a vaginal birth experienced perineal trauma, eight of which were identified as second degree tears. Only one of these was sutured by the midwives. There is controversy, both anecdotally and in the literature about the practice of not suturing second degree tears (Clement & Reed, 1999). The practice needs to be examined and evaluated especially as it is not evident whether the midwives who made the decision not to suture had the opportunity to formally review the effectiveness of this decision with the women some weeks postpartum. The reasons for suturing and not suturing need to be examined. It is possible that midwives felt reluctant to suture as they were in a home. Equally, it is possible that the midwives felt that suturing was not necessary and were able to check on the accuracy of that decision in longer term follow up. These issues need further exploration with the model of care and the midwives.

Midwives spend on average four hours each attending a homebirth (equates to eight hours of midwife time). This compares favourably with the number of midwife hours usually allocated to each labouring woman in the labour ward setting. Workforce measurement tools often use 10 hours of midwife time per woman in determining the number of midwives required.

The outcomes for the babies were positive. The babies were healthy and of an appropriate weight and gestation.

The women reported mostly very positive experiences with the homebirth model. The most negative experiences were related to the ability of the health systems policies to accommodate their individual needs.

The experiences of the midwives and the organisation as a whole were also positive. The biggest challenge or issues were related to ongoing sustainability. This was particularly in relation to the number of midwives who could provide this model of care at present, the need for mentoring for those who are keen to develop into the model and ongoing obstetric support. The workforce issues are challenging and almost circular. More midwives are required if more women are to be offered the model and more midwives are to have the opportunity to be mentored and attend the required numbers of births before they can be a primary midwife. However, as the numbers of midwives who can currently provide the service is small (only 2-3 at present) it is difficult to see how more women can be offered the service.

Other challenges include the need for leadership and ongoing coordination of the model. The Project Midwife position was part-time and temporary which limited the opportunities for the establishment of effective relationships and ongoing face to face mentoring. The funding for the Project Midwife is now completed and the leadership of the model needs to be provided through the maternity unit. It has been suggested that the Clinical Midwifery Consultant for Practice Development will take on this leadership role. Further planning into ways to support mentoring and ongoing development also needs to occur in order for the model to grow. Future models need to embed leadership and ongoing mentoring into the unit to ensure it is fulltime and part of the service from the outset.

The numbers of women accessing this model of care at this stage are small. To be a viable long term model of care it seems likely that the numbers of women needs to increase. In NSW as a whole, only a very small number of women are currently having homebirths (due to lack of community acceptance and/or lack of an appropriate and accessible model of care or midwives). For example, in 2005 only 152 women were reported to the NSW Mothers and Babies Report as planning a homebirth with 40 of these women (26%) having a hospital birth (NSW Health, 2007).

Providing the option to give birth at home within the public health system encourages pregnant women to have confidence in their ability to give birth normally without medical intervention. It also engages women in an active and involved birthing experience. Findings from this evaluation could assist with practice development models for all pregnant women

throughout the maternity system and the implementation of a similar model in other Area Health Services.

Recommendations

A number of recommendations have been identified as a result of this evaluation. These include:

1. The publicly funded homebirth program continues from St George Hospital and is expanded to other sites within the SESIAHS and across NSW to ensure equitable access for all women.
2. A substantial position, such as a Clinical Midwifery Consultant in Practice Development, needs to be in place to provide leadership for the service. Initial support from a Project Midwife may facilitate development and implementation.
3. A Steering Committee needs to continue to ensure that the model can develop and be sustained. It is essential that the membership is multidisciplinary and have more than one consumer representative.
4. The advertising and promotion of the service be more extensive and more widespread.
5. The processes to ensure quality and safety continue including the multidisciplinary review of guidelines and regular review of all booked homebirths.
6. The midwives working in the homebirth model need to be included in consultation processes around the development or updating of any policies that will impact on the model.
7. A commitment to ongoing workforce issues is essential. This includes exploring mechanisms for mentoring midwives to ensure this occurs on a continuous basis and new midwives are given the opportunity to provide the service. Resources must be available for training (homebirth workshops, suturing instruction, team building, ALSO courses and credentialling) for all midwives who work in midwifery continuity care, in particular, the homebirth model.
8. The best way to maintain and recruit midwives to work in the homebirth model needs to be explored. This may include contracting locally practising homebirth midwives to provide the service as occurs in the Albany Midwifery Group Practice in the UK.
9. These models should be a recognised option for women and integrated into existing maternity service provision. Support from managers, obstetricians, general practitioners and the ambulance service is essential.

10. Ongoing audit and evaluation needs to occur including clinical outcome data and the experiences of women and midwives. Streamlining of this data collection process needs to be examined to ensure that the current Obstetrix database can easily measure the outcomes of women booked for homebirth; antenatal transfers; intrapartum and postpartum transfers; and other relevant outcomes.

REFERENCES

- Ackermann-Leibrich, U., Voegeli, T., Gunter-Witt, K., Kunz, I., Zullig, M., Chindler, C., et al. (1996). Home versus hospital deliveries: follow up study of matched pairs for procedures and outcome. *BMJ*, *313*(7068), 1313-1318.
- ACMI. (2004). *National Midwifery Guidelines for Consultation and Referral*. Canberra: Australian College of Midwives Inc.
- Audit Commission. (1998). *First Class Delivery: A National Survey of Women's Views of Maternity Care*. London: Department of Health, UK.
- Bastian, H., Keirse, M. J., & Lancaster, P. (1998). Perinatal death associated with planned home birth in Australia: population based study. *BMJ*, *317*(7155), 384-388.
- Chamberlain, G., Wraight, A., & Crowley, P. (1997). *Home births: the report of the 1994 confidential enquiry by the National Birthday Trust Fund*. Carnforth: Parthenon Publishing Group Ltd.
- Chamberlain, G., Wraight, A., & Crowley, P. (1999). Birth at home. *Practising Midwife*, *2*(7), 35-39.
- Clement, S., & Reed, B. (1999). To stitch or not to stitch? A long-term follow-up study of women with unsutured perineal tears. *Practising Midwife*, *2*(4), 20-28.
- Cluett, E., Nikodem, V., McCandlish, R., & Burns, E. (2006). Immersion in water in pregnancy, labour and birth. *Cochrane Pregnancy and Childbirth Group Cochrane Database of Systematic Reviews, Issue 4, Published by John Wiley and Sons, Ltd.*
- Crotty, M., Ramsay, A. T., Smart, R., & Chan, A. (1990). Planned homebirths in South Australia 1976-1987. *Medical Journal of Australia*, *153*(11-12), 664-671.
- Department of Health. (1998). *A First Class Service: Quality in the New NHS*. London: HMSO.
- Department of Health. (2004). *National Service Framework for Children, Young People and Maternity Services*. London: HMSO.
- Department of Health Expert Maternity Group. (1993). *Changing Childbirth*. London: Department of Health HMSO.
- Gulbransen, G., Hilton, J., & McKay, L. (1997). Home birth in New Zealand 1973-1993: incidence and mortality. *New Zealand Medical Journal*, *110*(1040), 87-89.
- Homer, C. S. E., Davis, G. K., Petocz, P., Barclay, L., Matha, D., & Chapman, M. G. (2000). The obstetric outcomes of low risk women: birth centre versus labour ward. *Australian Journal of Advanced Nursing*, *18*(1), 8-12.
- Johnson, K., & Daviss, B. (2005). Outcomes of planned home births with certified professional midwives: large prospective study in North America. *BMJ*, *330*(7505), 1416-1422.
- Minister of Health NSW. (2005). *Press release: Publicly funded homebirth at St George – a first for NSW*. Retrieved from http://www.health.nsw.gov.au/news/2005/20050302_00.html.
- Murphy, P. A., & Fullerton, J. (1998). Outcomes of intended home births in nurse-midwifery practice: a prospective descriptive study. *Obstetrics and Gynecology*, *92*(3), 461-470.
- Nixon, A., Bryne, J., & Church, A. (2003). *An Evaluation of the Northern Women's Community Midwifery Program*. Adelaide: Department of Human Services.
- Northern Region Perinatal Mortality Survey Coordinating Group. (1996). Collaborative survey of perinatal loss in planned and unplanned home births. *BMJ*, *313*(7068), 1306-1309.
- NSW Health. (2000a). *Homebirth Policy Statement. Circular 2000/53*. Sydney: NSW Health Department.
- NSW Health. (2000b). *The NSW Framework for Maternity Services*. Sydney: NSW Department of Health.
- NSW Health. (2005a). *NSW Health Credentialling Framework for Midwives*. Retrieved from www.health.nsw.gov.au.
- NSW Health. (2005b). *Policy Directive: Homebirth Policy Statement*. Sydney: NSW Department of Health.

- NSW Health. (2007). *New South Wales Mothers and Babies 2005*. Sydney: Centre for Epidemiology and Research. NSW Department of Health. . .
- Olsen, O., & Jewell, M. D. (1998). *Home birth versus hospital birth (Cochrane Review)* (Issue 3 ed.). Oxford: Update Software.
- Senate Community Affairs References Committee. (1999). *Rocking the Cradle: A Report into Childbirth Procedures*. Canberra: Commonwealth of Australia.
- Springer, N. P., & Van Weel, C. (1996). Home birth. Safe in selected women and with adequate infrastructure and support. *British Medical Journal*, *313*, 1276-1277.
- Thiele, B., & Thorogood, C. (1997). *Community Based Midwifery Program in Fremantle WA*. Fremantle: Centre for Research for Women (WA) and the Fremantle Community Midwives.
- Wiegers, T., Keirse, M. J. N. C., & van der Zee, J. (1996). Outcome of planned home and hospital births in low risk pregnancies: prospective study in midwifery practice in the Netherlands. *BMJ*, *313*(7068), 1309-1313.
- Woodcock, H. C., Read, A. W., Moore, D. J., Stanley, F. J., & Bower, C. (1990). Planned homebirths in Western Australia 1981-1987: a descriptive study. *Medical Journal of Australia*, *153*(11-12), 672-678.
- World Health Organisation. (1996). *Care in normal birth: a practical guide*. Geneva: Maternal and Newborn Health/Safe Motherhood Unit, Family and Reproductive Health, WHO.

APPENDIX A: Home Birth Information Sheet

Choosing To Give Birth at Home South East Sydney Area Health Service (South East Health)

Safety First

According to research, home birth is as safe as hospital birth for women who do not have complications, including women having their first babies. Where homebirth is backed up by a supportive hospital system, there is no evidence to suggest that choosing to give birth at home is unwise for the majority of women with straightforward pregnancies. In South East Health, we can now offer women who have a healthy pregnancy and are anticipating a normal birth, the option to plan for a home birth with known midwives.

Making choices about where to give birth

Deciding where you will feel most comfortable and safe to labour and give birth is an important individual decision. In Australia, people tend to assume you will have your baby in hospital. For a long time, it was mistakenly thought that hospitals were safer than home and so now home birth has become a rare event. It is sometimes hard to keep sight of the fact that birth is a normal, healthy, life event and that giving birth at home is a perfectly reasonable choice for most women.

When making choices about where you will feel safe to have your baby, it is important to remember that midwives are trained to deal with emergencies in any setting. In the very unlikely situation where an emergency arises at a home birth, midwives have all the necessary equipment and emergency drugs with them to respond safely. Two midwives will attend your birth. They will have good support from the ambulance service and from doctors in the hospital, should transfer to hospital be necessary.

It may be worth remembering that women who give birth at home find it much easier to manage their pain in the comfort and security of their own homes. They describe a sense of control in their familiar surroundings and a feeling that birth at home is very much a 'family event'.

Being flexible

Occasionally, women develop complications during pregnancy, in labour, or in the period following birth, where they need access to specific care that is only available within a hospital environment. Therefore, even if you have chosen to have your baby at home, if complications arise at any stage, your midwife will discuss the situation fully with you. She may advise consultation with an obstetrician or transfer to the hospital.

In addition there may be situations due to unforeseen circumstances such as staffing issues when the hospital is unable to accommodate birth at home and you will be requested to come to the hospital for the birth. It is anticipated that these occasions will be rare and we request your patience and understanding if the situation arises. The midwives will inform you as soon as they are aware of the possibility.

During your pregnancy

During your pregnancy you will be receiving antenatal care from a small number of midwives. You will be allocated a primary midwife who will take responsibility for coordinating your care. She will ensure that another midwife is on call for you whenever she is unavailable.

If your decision is to give birth at home, your midwife will ask you to sign a form indicating that you have read this information leaflet and that you are informed about the benefits and risks associated with place of birth. In addition it is advised that in order to build up a trusting

relationship with your midwives that you commit to attending your antenatal visits as scheduled.

When you are about 36 weeks pregnant, your midwife will come and visit you at home for your antenatal visit. This will give her a chance to see where you live and to make plans with you for the labour and for support in the days following birth. It is your responsibility to ensure your home environment is safe for the midwives to work in and to alert the midwives to any possible dangers. At this visit, she would like to meet anyone else who will be attending the birth. Please make sure your support people also read this information sheet so that they can be fully involved in discussions. We will ask them to sign a form acknowledging that their role is to provide physical and emotional support during labour and/or to take care of any children who may be present.

During labour

Two midwives will be available for you during your labour. Once you feel that labour is established and that you would like the midwives to be with you, they will come to your home. There are a lot of advantages in staying at home, such as sleeping undisturbed while labour is getting established, watching television or listening to music, using a water pool or bath/shower, and moving freely around your home.

The midwives will bring with them all the equipment that is needed for a safe birth. They will be observing your labour and your baby's heart rate. If they are concerned about the progress of your labour or the health of your baby, they will discuss this with you and may recommend transfer to hospital. The most common reason for transferring is a labour that does not appear to be progressing. In this situation women usually need help in the form of medication to make the contractions stronger and often they proceed to have a normal birth in hospital.

After your birth

The midwives will stay with you in the immediate period after the birth to provide support especially during the baby's first feed. The midwives will then continue to visit you at home after the birth. They will come every day in the first couple of days and then less frequently depending on how everything is going. Most women will have visits up to 10 days. The postnatal visits can extend if you are having any difficulties with the baby. After this the child and family health nurse will be available for you at your local clinic.

How to find out more

If you want to talk more about homebirth, please feel free to discuss this with your midwife or doctor. If you want to read more about the research regarding home birth, you can access the Cochrane Library free online on <http://www.update-software.com/clibng/cliblogon.htm> click "Log on anonymously" and then type in "home versus hospital birth" in the search space. This review will give you the latest evidence about home birth.

Some interesting websites about home birth include:

<http://www.changesurfer.com/Hlth/homebirth.html> - a list of relevant, recent research in the area of home birth

<http://www.homebirthsydney.org.au> - the website of Homebirth Access Sydney with birth stories and information about planning a home birth

<http://www.homebirth.org.uk> - a UK website with home birth stories and practical information about planning for a home birth

Homebirth support groups:

Eastern Suburbs Homebirth Support Group:

Based in Bronte, call Claire Saxby 9664 1010

St George and Sutherland South East Sydney Homebirth Support group:

call Julie Clarke 9544 6441

Books to read:

Homebirth by Sheila Kitzinger

The Homebirth Advantage by Meyer Eisenstein

APPENDIX B: Selection Criteria for Primary Midwives

SELECTION CRITERIA FOR PRIMARY MIDWIVES WORKING IN HOMEBIRTH MODELS

South East Sydney Illawarra Area Health Service

A midwife offering women the potential to give birth at home will present a portfolio demonstrating woman centred, evidence based practice that meets the following criteria:

- Demonstrates an understanding of the philosophy of homebirth
- Registered as a midwife with the NSW Nurses (and Midwives) Board
- Employed in the South East Sydney Illawarra Area Health Service
- Has completed an *Advanced Life Support in Obstetrics* (ALSO) course in the past five years
- Experience of working in midwifery continuity of care/caseload practice
- Participates in mentoring and reflective practice with experienced midwives
- Demonstrates a commitment to participating in a structured practice review process
- Successful completion of a recognised credentialing process with hands on assessment/scenarios
- Has competence in the following skills:
 - Perineal Suturing
 - Cannulation
 - Neonatal Resuscitation
 - Maternal Resuscitation
 - Knowledge of *Australian College of Midwives Guidelines for Referral and Consultation*
- Has attended a minimum of five births at home as primary midwife or undertakes to do so with mentor midwife

Additional Selection Criteria for Mentor Midwives

Meets requirements of a primary midwife in the SESAHS Homebirth Program.

Additional evidence that demonstrates the following:

1. homebirth experience of a minimum of ten (10) planned homebirths as the primary midwife providing continuity of midwifery care
2. has attended a mentoring program OR has been in a position where education/supervision of less experienced midwives has been part of the job description.

APPENDIX C: Text for Consent Form (women)

TEXT: CONSENT FOR HOMEBIRTH

I [PRINT NAME] of [ADDRESS]

request to have my labour and birth at home. In so doing I acknowledge and accept that responsibility for decision-making will be shared between myself and the attending midwife/midwives. I have read the *Information Sheet on Homebirth* and I have had the opportunity to discuss my birth plans and ask questions.

I understand that the primary midwife will visit me in my home at around 36 weeks of pregnancy and meet the people who will be present at the time of the birth of my baby.

I also undertake to accept my midwife's advice in relation to any possible transfer to hospital or emergency situation.

SIGNATURE _____ DATE _____

-

WITNESS NAME

_____ SIGNATURE _____

(PRINT)

DATE _____

Interpreter required: No Yes (if yes, please sign the following)

Signature/sticker of
interpreter: _____

APPENDIX D: Text for Consent Form (Support People)

TEXT: CONSENT FOR HOMEBIRTH – SUPPORT PERSONS

I [PRINT NAME] of [ADDRESS]

will be attending the homebirth of

I understand that a midwife, or midwives, will be present at the labour and birth and that my role is to provide appropriate physical and emotional support.

SIGNATURE _____ DATE _____

WITNESS NAME _____
(PRINT)

SIGNATURE _____

DATE _____

Interpreter required: No Yes (if yes, please sign the following)

Signature/sticker of interpreter: _____

APPENDIX E: Guideline - Homebirth

HOME BIRTH GUIDELINE



OPTIMAL OUTCOMES

- Increased maternal options for labour and birth
- Safe birth of a live infant



PATIENTS

- Women requesting to give birth at home



STAFF

- Midwives credentialed for homebirth
- Midwives working under supervision of credentialed midwife
- Medical officers



BEST PRACTICE PRINCIPLES

- Women requesting/booking a homebirth will be given the *Choosing to Give Birth at Home* information sheet at initial visit.
- Women will be requested to sign the appropriate consent form during her pregnancy prior to the home visit at 36 weeks gestation.
- The booking and caring for women requesting homebirth will be in accordance with ACMI National Midwifery Guidelines for Consultation and Referral
- A RAP Obstetrician will review the medical records of all women requesting a homebirth.
- Antenatal care will be provided in the Birth Centre or the woman's home as arranged by the midwife. Medical consultations will be provided in the hospital as necessary after discussion with the RAP Obstetrician.
- At 36 weeks gestation a home visit will be conducted with the woman's support people present in order to discuss and plan for the labour, birth and postnatal care. Support people will be asked to read the information sheet and sign a consent form.
- Intrapartum care will be provided in the woman's home unless transfer to hospital is required. At a homebirth, two midwives will be present.
- From 37 weeks a fully stocked homebirth kit will be left at the woman's home with instructions for the kit to be kept in a safe place out of reach of children and away from direct heat. One fully stocked homebirth kit will be kept at the hospital.
- When birth is imminent, or whenever appropriate, the back up midwife is requested to attend the home.
- After the birth the midwife will continue care until the conditions of mother and baby are stable. Observations will continue until a minimum of one hour after the passage of the placenta.
- The attending midwife will examine the newborn after the birth. If there are indications of abnormality the baby will be transferred immediately to St. George Hospital for neonatal assessment
- After the birth the midwife will organise allocation of a MRN number for the baby. This can be done by either phoning the ATS hotline (9350 2888) from the woman's home and giving the operator the details OR when the midwife returns to the hospital by entering the details into the iPM system. It is important to ensure that the presenting problem field is marked as *homebirth* and the ward field as *HBS*.
- The midwife will visit the woman within 24 hours and postnatal care is planned in accordance with the woman's and baby's needs.
- The woman will be referred to her GP for the routine examination of the newborn within the first week unless an earlier examination is deemed necessary.
- The attending midwife will complete all relevant documentation



HAZARDS

- Unattended homebirth
- Failure to appropriately refer or transfer
- Major maternal morbidity
- Major perinatal morbidity/mortality



DOCUMENTATION

- Clinical notes
- Notification of birth
- Midwives data collection
- Caseload database
- 'Choosing to give birth at home' information sheet
- Consent forms



EDUCATIONAL NOTES

- The proposal to offer homebirth to low risk women as part of public hospital maternity services has been developed by consumers and multidisciplinary representatives from St George Hospital, the Royal Hospital for Women and Sutherland Hospital. It follows a NSW Department of Health directive that homebirth should be offered in the public sector.
- A meta-analysis of observational studies included in the Cochrane review suggests that planned homebirth is associated with less intervention than hospital births. There is weaker evidence to suggest that home birth may be associated with fewer complications and fewer neonatal problems.



RELATED POLICIES

- Homebirth transfer guideline
- Home visit at 36 weeks
- Homebirth kit
- 'Choosing to give birth at home' information sheet
- Normal vaginal birth



REFERENCES

- Australian College of Midwives Incorporated (2004) '*National Midwifery Guidelines for Consultation and Referral*'; ACMI
- Johnson, K.C. & Daviss, B.A., (2005). 'Outcomes of planned home births with certified professional midwives: large prospective study in North America'. *British Medical Journal*. 330 p1416.
- Olsen, O. & Jewell, MD. (2004) 'Home versus hospital birth'. Cochrane Review. *The Cochrane Library*. Oxford.
- Olsen, O. (1997). 'Meta-analysis of the safety of homebirth'. *Birth*, 24, 4-13.
- NSW Health Department, (2006), Policy Directive – Maternity- Public Homebirth Services. PD2006_045

APPENDIX F: Guideline - Transfer to hospital

HOMEBIRTH: TRANSFER TO HOSPITAL

OPTIMAL OUTCOMES

- Safe and efficient transfer from home to hospital

PATIENTS

- Women or babies requiring transfer from home and admission to hospital

STAFF

- Midwives
- Nursing
- Medical

BEST PRACTICE PRINCIPLES

- Indications for consultation, referral and/or transfer of mother or baby to hospital are those listed in the ACMI National Midwifery Guidelines for Consultation and Referral.
- Consult with the midwife in charge of Delivery Suite regarding the assessment and admission for mother (consult with the RAP Obstetrician on call regarding the need for admission of mother)
- Contact the admitting officer in Emergency Department (ED) (93501744) regarding the reason for transfer of baby for assessment and admission.
- Transport is either provided by the family or via the Ambulance Service
 - ◊ For emergency ambulance transport call 000 and identify yourself as a midwife from the St George Homebirth Project. The call operator will ask you a series of questions in order to prioritise the call.
 - ◊ Ensure the ambulance officer has the woman's MRN and admitting doctor's name
- The baby should be taken to the ED for resuscitation and stabilisation. ED senior staff will assess the baby and liaise with the Paediatric team. Once stable the baby can be transferred to the Special care Nursery.
- Follow protocol for admission of mother and/or baby.
- Special Care Nursery staff to inform birthing services coordinator of baby's admission.
- In the event of a woman/family disagreeing regarding transfer to hospital when complications occur, the midwife is advised to document the situation and to formally notify the RAP Obstetrician (mother) and Paediatric Consultant (baby). The woman must confirm her decision not to accept the advice of the midwife in writing.

HAZARDS

- Delay in transfer to hospital

DOCUMENTATION

- Clinical notes
- ObstetriX

EDUCATIONAL NOTES

- Midwives attending women at homebirths must exercise their professional judgement in situations that may arise during a homebirth. In the event of a complication the midwife will arrange immediate referral to the appropriate service.
- There is no cost of ambulance transfer from home to hospital for women booked at St. George Hospital.

RELATED POLICIES

- Admission to delivery suite

- Admission to SCN



REFERENCES

- Australian College of Midwives Incorporated, (2004) *National Midwifery Guidelines for Consultation and Referral*, ACMI

APPENDIX G: Guideline – Home visit at 36 weeks

HOME VISIT AT 36 WEEKS



OPTIMAL OUTCOMES

- Well prepared women and support teams



PATIENTS

- Women booked for homebirth



STAFF

- Midwives credentialed for homebirth
- Midwives under supervision of credentialed midwife



BEST PRACTICE PRINCIPLES

- The midwife will take particular note of landmarks in order to assist in finding the home when the woman is in labour.
- The woman's home will be reviewed to ensure a safe environment for the midwives as per the Families First Home Visiting Guidelines.
- The midwife will explain the use of oxytocics in the management of the third stage and give the woman a supply of Syntocinon (enough for infusion as well as bolus administration) and Ergometrine and ensure it is placed in the fridge out of the reach of children.
- The midwife will explore various choices the woman might like to make around her labour and birth.
- The midwife will clarify the roles of the midwives and the support team.
- The homebirth information sheet will be reviewed by the woman and her support team and the consent forms signed.
- Childcare for siblings will be explored and, if children are to be present at the birth, appropriate arrangements and education will be discussed for their involvement and support.
- The midwife will reassure the woman and her support team that all the practice midwives work within a similar philosophy, should the need arise for another midwife to attend the birth.
- The midwife will ensure that the woman has the appropriate numbers for contacting the hospital and the midwife and know when to contact the midwife.
- What to do if the baby is born before the midwife arrives will be discussed.
- The midwife will discuss arrangements for practical support from the woman's family and friends after birth and in the early weeks with the new baby



HAZARDS/UNWANTED OUTCOMES

- Unprepared woman and support team
- Home environment compromises care of woman and/or baby in labour/birth



DOCUMENTATION

- Clinical notes
- Consent for Homebirth Service
- Consent for Homebirth Service – Support persons
- Families First Home Visiting Guidelines



EDUCATIONAL NOTES

- The 36-week home visit is important to bring together and clarify roles of the support team for the labour and birth. This visit allows for rapport to be built between the midwives and the woman's support team before the stresses of a labouring situation.
- It is recommended that Oxytocin be stored at temperatures between 2°C and 8°C.

☞ **RELATED POLICIES AND PROCEDURES**

- Homebirth Guideline
- Homebirth Transfer to Hospital
- Homebirth kit

☞ **REFERENCES**

- Leap, N. (2000), 'The less we do the more we give' in M. Kirkham (Ed). *The Midwife-Mother Relationship*. Macmillan: London.
- Novartis Pharmaceuticals, (2005), *Product information for Syntocinon – synthetic oxytocin*.
Novartis
Australia Pty Ltd. North Ryde. NSW

APPENDIX H: Homebirth Project – Consumer Survey**HOME BIRTH CONSUMER SURVEY**

Dear

On behalf of St George Hospital, congratulations on the birth of your baby

The St George Homebirth Project commenced in November 2005 and offers healthy pregnant women the option of having their baby at home. As this project is a first for NSW we need to evaluate it carefully. Part of the evaluation is to ask women what they thought.

Our records show that you booked with the St George Homebirth Project to have your baby. It would be greatly appreciated if you could fill in the enclosed survey and return it by posting it back in the paid reply envelope.

Your responses on survey will be kept confidential. The midwives who attended you will not have access to your survey. The Project Coordinator will be collating the responses.

Thank you for your cooperation.

Shea Caplice
Project Midwife
Ph: XXXXXXXX

**ST GEORGE HOMEBIRTH PROJECT
CONSUMER SURVEY**

1. Why did you decide to book for a homebirth?

2. Where was your baby born?

- Home
- Birth Centre
- Delivery Suite
- Operating theatre

3. What was your experience?

4. How did you feel about this experience?

5. How did you feel about the midwifery care you received?

6. Do you feel you were given appropriate information and control throughout your pregnancy, birth and afterwards?

- Yes
- No

Comments _____

7. If you were to have another baby would you choose the same type of care?

- Yes
- No

Why?

Thankyou for your time