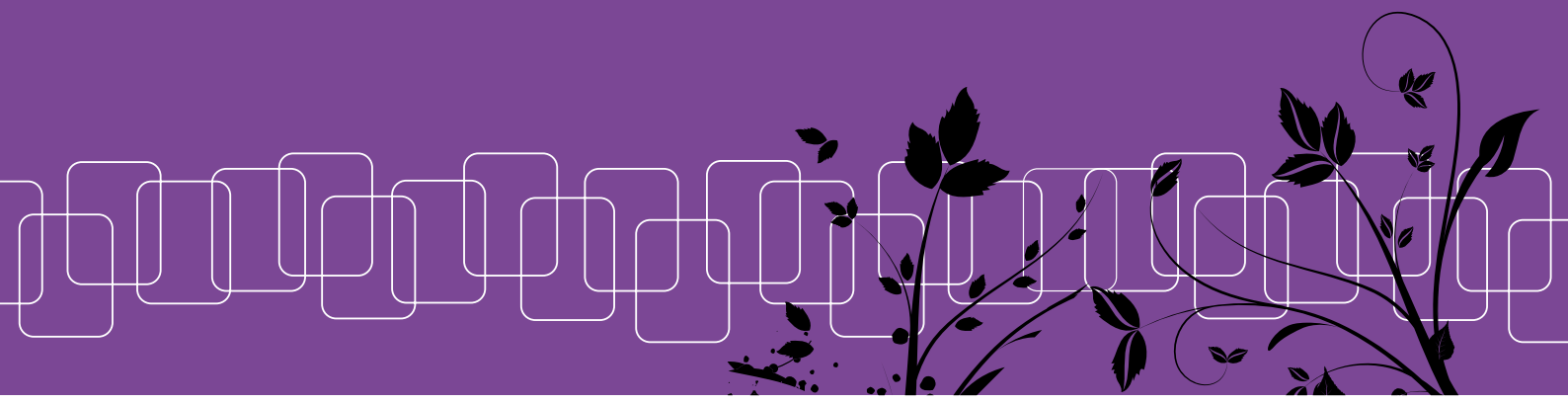
Implementing a public home birth program

Guidance for Victorian public health services



VICTORIA State Government | Health and Human Services

Implementing a public home birth program

Guidance for Victorian public health services

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Where the term 'Aboriginal' is used it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it is part of the title of a report, program or quotation.

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- Paediatric Infant Perinatal Emergency Retrieval service
- Australian College of Midwives
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists
- Australian Nursing and Midwifery Federation Victorian Branch
- Victorian Managed Insurance Authority
- Home Birth Australia
- Maternity Choices Australia
- Midwives Australia.

This guidance material was prepared by the Department of Health & Human Services based upon the available evidence drawn from large cohort studies and from evaluations of the public home birth programs currently operating in Australia. The guidance material also reflects the findings from an independent evaluation of the Victorian pilot of the public home birth program. This pilot was conducted from 2009 to 2012.

The guidance material is intended to be used as a general resource only and should not be relied upon as an exhaustive or determinative clinical decision-making tool. All decisions about the feasibility, establishment, delivery and evaluation of a public home birth program are decisions for the hospital or health service consistent with Victoria's devolved model of governance. Furthermore, all decisions in relation to the delivery of care to women and/or their babies should be made by appropriately qualified personnel in each case. Hospitals, health services and others should seek their own independent professional advice.

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Contents

1. Introduction

Having a baby at home through the public hospital system is now an option in the majority of states in Australia.[1] Even though the numbers of women who are currently able to access this maternity service model are small, support and interest is growing.

In Victoria, the percentage of women choosing to have a home birth has increased from 0.3 per cent in 2005 to 0.7 per cent in 2012.[1] In recent years, the ability of public maternity services to provide home birthing programs has been demonstrated through two pilot programs, at Casey and Sunshine Hospitals, that operated between 2009 and 2012. The two public home birthing programs continue to grow.

The Victorian Government is committed to providing women with more choice and access to a range of safe maternity service models. A maternity program that includes a home birth stream provides women - at low risk of pregnancy or birth complications - an option to have a planned birth at home under the care of public hospital midwives.

As public home birth is a new service model in Victoria, some direction and guidance for boards of health services, health service executives and clinicians is needed to assist in the assessment of the appropriateness of the model for the local context and to clarify the requirements for a safe, high quality and sustainable program.

The safe operation of a home birth program is a key consideration and as such it has been determined that to consider establishing a home birth program, health services must be providing, as a minimum, maternity services consistent with Level 3 care as described in the *Capability framework for Victorian maternity and newborn services* (DHHS 2010). Complexity of care for a Level 3 service includes the management of normal risk pregnancies, including the management of labour, birth and puerperium at 37 weeks gestation or more including elective and emergency caesarean section.

The expertise and wisdom that the pilot sites have acquired forms the basis of this guide. Since December 2009 more than 84 women have had a planned birth at home through Casey Hospital and 277 women through Sunshine Hospital's program. These programs have developed and responded to their local contexts and the ongoing feedback from clinicians and women. Such operational, clinical and corporate knowledge and experience has been captured and blended with the relevant evidence and other useful resources to form this guide.

At present there is no high level evidence from randomised controlled trials to assess the overall relative risks or benefits of home birth versus hospital birth for low risk women. Therefore, the advice in this guide is drawn from large cohort studies and from evaluations of the public home birth programs currently operating in Australia. In addition, a positive independent evaluation of the Victorian pilots, consumer interest and the Ministerial Perinatal Services Advisory Committee have supported the expansion of public home birth options in Victoria and are reflected in this guide.

Whether a home birth program is part of the maternity service at a public health service is ultimately a decision for the health service board and executive team and will be informed by the views of the community and the workforce. This guide aims to assist boards to do their due diligence and provides a framework to plan, deliver and monitor a public home birth program.

2. Purpose and scope

Implementing a public home birth program: guidance for Victorian public health services provides information and resources to assist Victorian public health services interested in establishing a home birth program.

For the purposes of this guide, the term 'health service' is taken to mean public hospitals or health services providing, at a minimum, Level 3 care as described in the *Capability framework for Victorian maternity and newborn services* (DHHS 2010) to women receiving maternity and birth services (see Introduction). The term 'public home birth' is defined as a planned event where a woman with a healthy pregnancy chooses to have a vaginal birth at home under the care of public hospital midwives. It does not apply to women planning a home birth under the care of privately practicing midwives or to public patients having unplanned home births.

In Victoria, public health services are independent statutory entities and are responsible for ensuring that the care provided to all patients is safe, high quality and within the capability of the service. For health services providing maternity care, this includes decisions related to the settings and models of maternity care offered such as home birth programs.

The guidance outlines considerations for health services in four key sections:

1. Assessing the feasibility of a home birth program
2. Planning a home birth program
3. Providing a home birth program
4. Data, reporting and monitoring a home birth program.

Each section includes principles and guidance information and where possible, further resources. The guidance is based on the knowledge and experience of two Victorian pilot sites, evidence in the research and input from the key stakeholders previously acknowledged. In addition, the recommendations of the Victorian State Coroner and the Consultative Council on Obstetric and Paediatric Mortality and Morbidity have informed the guide.

The appendices are as follows:

1. Organisational readiness checklist
2. Evidence for determining eligibility criteria
3. Sample home birth kit equipment list
4. Sample transfer indications and protocols
5. Sample home visit risk assessment form.

A resource kit containing examples of relevant templates, forms and procedures will be available on the department website to support implementation of the guide.

Future revisions to this guide will incorporate new information as existing and new public home birth programs are introduced and grow over time.

3. Principles

The guidance for health services outlined in this document is based on the following principles for public home birth programs:

Principle 1

A home birth program is established where a health service has the capacity, capability and demand to provide a safe, high quality and sustainable program and where a robust feasibility and planning process has been undertaken.

Principle 2

Health services considering a home birth program lead effective and open consultation, engagement and communication within their organisation and with the local community, key service partners and other healthcare providers.

Principle 3

A home birth program is integrated into the health service's maternity service and appropriately resourced to provide high quality and safe care in a community context.

Principle 4

The eligibility of women for a home birth program is determined by health services and is informed by evidence-based clinical guidelines, individualised risk assessments and the capacity and capability of the organisation.

Principle 5

A home birth program is woman-centred and women are supported to make informed decisions about their own care and the care of their baby.

Principle 6

A safe and quality home birth program is informed by data to drive service improvements and is evaluated regularly to ensure it is high performing and responsive to the needs of the community and key partners.

4. Guidance for Victorian public health services

This section provides guidance for public health services interested in establishing a public home birth program. The guidance is organised around the six principles outlined in Section 3. Consistent with Victoria's devolved model of governance, individual health services are responsible for deciding how to plan, develop, implement and monitor their home birth program.

4.1 Assessing the feasibility of a home birth program

Principle 1

A home birth program is established where a health service has the capacity, capability and demand to provide a safe, high quality and sustainable program and where a robust feasibility and planning process has been undertaken.

Health service guidelines

- Public health services, particularly the boards of health services, are responsible for deciding if a health service will provide a public home birth program and for ensuring that the program delivery and operation is consistent with relevant legislation and government policies.
- The decision to implement a home birth program and the success of a program will be dependent on a range of organisational and contextual factors. Prior to any planning, health service executives and boards will need to consider the feasibility of implementing a public home birth program.
- To consider establishing a home birth program, health services must be providing, as a minimum, maternity services consistent with Level 3 care as described in the *Capability framework for Victorian maternity and newborn services* (DHHS 2010). This level of care includes the management of normal risk pregnancies including the management of labour, birth and puerperium at 37 weeks gestation or more including elective and emergency caesarean section.
- Caseload midwifery is recommended for home birth programs as it facilitates a strong relationship between the woman and her midwife/midwifery team.
- Feasibility assessments for small maternity services in particular are critical to ensure that the decision making distinguishes between service feasibility and sustainability.

Implementation guidance

Feasibility assessment

The purpose of the feasibility assessment is to ensure that on balance there is a reasonable probability that the program will be successful and sustainable. After receiving the feasibility assessment, the board or executive may require further investigation or exploration of issues to be able to make a decision.

A formal feasibility assessment is a critical preliminary step to ensure responsible and accountable governance. The service planning parameters that may be part of a feasibility assessment include:

- Key organisational factors such as the capability level and capacity of the maternity service.
- Current range of maternity service models and experience with caseload midwifery practice. Caseload midwifery describes a model in which a 'primary' midwife and a 'back-up' midwife take care of a woman during pregnancy, labour, birth and in the postnatal period.
- Workforce profile including staff interest in home birth and skills.
- The proximity, capacity and capability level of other maternity service providers in the local region.
- Birthing activity trends and population projections of the target low risk cohort.
- Local community interest in a public home birth program.
- Anticipated revenue and costs associated with the operating requirements of the program.
- Impact on other clinical services including maternity programs.

A robust assessment of the feasibility of establishing a home birth program will support the board to decide if it is appropriate to undertake further planning at that time. Not all health services will be able to offer public home birthing and there is no single model that will work for every health service.

Health services may wish to audit their maternity records to assess the number of women birthing at their service who may be suitable for a home birth against a range of clinical parameters such as weight, age and risk profile.

An independent assessment or input into the feasibility assessment may also be beneficial to provide balanced advice to the organisation. Health services should undertake their own review of evidence related to home birth and consider position statements on home birth from key colleges such as the Australian College of Midwives[2] and Royal Australian and New Zealand College of Obstetricians and Gynaecologists.[3] Health services are advised to document the findings of their feasibility assessment for future reference.

If the assessment recommends not to implement a program, the health service should consider communicating to the organisation and the community the general process used to determine the feasibility and what conditions would need to be met to revisit that decision.

The service may wish to engage with other maternity services who are implementing a home birth program to seek opportunities to work collaboratively to provide a safe, high quality and sustainable program for the local community.

Capability level

To consider establishing a home birth program, it is **mandatory** that health services are providing, as a minimum, maternity services consistent with Level 3 care as described in the *Capability Framework For Victorian Maternity And Newborn Services* (DHHS, 2010). This requirement is so that timely access to emergency caesarean section for women having a home birth can be provided without the need for a secondary transfer.

Midwifery models

There is no single model for home birth service delivery. Caseload midwifery is recommended for home birth programs as it facilitates a strong relationship between the woman and her midwife/midwifery team. The Victorian pilot sites consider this relationship to be central to providing a safe and effective home birth program. It is therefore important that the health service has experience in operating a sustainable caseload midwifery model before expanding their maternity program to include home birth.

Sustainability and smaller services

Sustainability of maternity services is a particular issue for rural and other small services. Ceasing service models that have become unviable is challenging for staff and the local community. Feasibility assessments for small maternity services in particular are critical to ensure that the decision making distinguishes between service feasibility and sustainability. It may be more difficult for smaller rural services to support multiple maternity models. Health services should consider the volume of patients in their current maternity models and whether there is sufficient demand to support a new program without impacting the viability of pre-existing models.

4.1 Further resources

- *Capability Framework for Victorian Maternity and Newborn Services,* DHHS, 2010 <http://www.health.vic.gov.au/maternitycare/maternityservices>.
- Victoria in Future 2014 provides comprehensive population modelling for Victoria <http://www.dtpli.vic.gov.au/data-and-research/population/census-2011/victoria-in-future-2014>.
- Population projections from the Australian Bureau of Statistics <http://www.abs.gov.au/>.
- *Position Statement on Homebirth Services to be read in conjunction with Guidance for Midwives regarding Homebirth Services, Australian College of Midwives,* 2011 <http://www.midwives.org.au/scripts/cgiip.exe/WService=MIDW/ccms.r?pageid=10084>.
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists' statement on home births, 2014 <https://www.ranzcog.edu.au/college-statements-guidelines.html>.

4.2 Planning a home birth program

Planning a home birth program can commence following a decision by the board of management or board of directors that a health service has the capacity and capability to provide a safe, high quality and sustainable program.

Principle 2

Health services considering a home birth program lead effective and open consultation, engagement and communication within their organisation and with the local community, key service partners and other healthcare providers.

Principle 3

A home birth program is integrated into the health service's maternity service and appropriately resourced to provide high quality and safe care in a community context.

Principle 4

The eligibility of women for a home birth program is determined by health services and is informed by evidence-based clinical guidelines, individualised risk assessments and the capacity and capability of the organisation.

Health service guidelines

- Health services seek independent legal, financial and industrial advice, and consult with the Victorian Managed Insurance Authority prior to establishing a home birth program.
- Health services assess service capacity and capability, in the context of clinical and financial risk, prior to establishing a home birth program.
- Health services consult with their community and key partners such as Ambulance Victoria during the planning phase for a home birth program.
- Individual health services determine eligibility criteria which are relevant to their local service and are responsible for deciding which women are clinically safe to enter their home birth program.
- Health services develop clinical pathways for the home birth program to support care in the antenatal, intrapartum and postnatal care periods including processes for consultation, escalation or referral when required.
- Health services ensure all staff providing home birth services have suitable confidence and competence to deliver high-quality and safe services in the home setting.
- In accordance with relevant legislation, health services ensure the health and safety of staff providing care in the home setting.

Implementation guidance

After determining and assigning the project management resources, the following steps should guide the planning phase:

1. Assess internal support and engagement
2. Assess community interest and expectations
3. Assess support from key partners
4. Establish governance arrangements
5. Assess organisational capability and capacity
6. Develop the service model (eligibility criteria, staffing models and clinical pathways)
7. Identify program resources and budget
8. Develop a communication and engagement strategy.

4.2.1 Assess internal support and engagement

Health services should assess the level of support for establishing a home birth program from staff, the community and key partners.

In particular, consultation with the local workforce will assist in ascertaining the local circumstances that will impact on the program establishment. Key staff to engage include:

- the chief executive officer and executive management team
- relevant program directors, for example women's and children's services
- medical staff such as directors of services, consultant obstetricians, senior obstetric registrars, paediatricians, anaesthetists and emergency staff
- nursing and midwifery staff such as unit managers and midwives across maternity and neonatal services
- support services such as pathology and pharmacy.

Strong midwifery and medical leadership is an important factor in any health service's decision to provide a home birth program and particularly from senior clinical and executive staff across service areas that would be involved in the program.

Appendix 1 provides a checklist to assist health services in assessing their organisation's interest and readiness to develop a home birth program.

4.2.2 Assess community interest and expectations

Health services should consult with women and families in the community to determine local interest in and the likely level of demand for a home birth program. This can be undertaken in an informal way (for example, seeking input from women at antenatal appointments) or formally (for example, undertaking a survey or scheduling community consultations).

Central to the success of a home birth program is ensuring expectations align with what can reasonably be provided. The expectations of women, their families and the wider community as well as health professionals and other key partners should be considered. How women's expectations of a service compare with their experiences may influence their satisfaction with the service. Discussions about the service model and eligibility for a home birth program should be included in any consultation with community.

4.2.3 Assess support from key partners

Health services are advised to consult with key partners such as Ambulance Victoria and the Paediatric Infant Perinatal Emergency Retrieval service to discuss the likely involvement and level of support from these organisations for a home birth program. It is recommended that Ambulance Victoria is consulted early in the planning stage.

Health services should also consult with other local health service providers who may receive transfers as well as local maternity care providers such as general practitioners or obstetricians and Maternal and Child Health providers.

4.2.4 Establish governance arrangements

The home birth program should be considered as an additional maternity service model within a health service. This ensures it is integrated within the existing health service governance arrangements.

Health services are encouraged to form a multidisciplinary steering committee to oversee the development, implementation and evaluation of the home birth program. This approach will strengthen a health service's governance of the program and its ability to provide safe, high quality maternity care to women who are eligible and choose to have a home birth. The composition of a steering committee is up to individual health services. It is recommended that health services consider inviting an Ambulance Victoria representative to their home birth steering committee. Health services may also consider inviting representatives from other key stakeholder groups such as professional colleges and unions.

Clinical governance

Clinical governance is where managers and clinicians share responsibility and are accountable for patient care, minimising risks, and for continuously monitoring and improving the quality of care. For Victorian public health services, compliance with the *Victorian clinical governance policy framework* is mandated.

Any risks that may be associated specifically with a home birth program should be managed within the health service's established clinical risk management systems and processes that support and promote the safety and quality of care.

In addition to the existing strategies for minimising risk in maternity services, health services should consider the following approaches to minimising potential risks associated with a home birth program:

- Establishing good governance including a multi-disciplinary steering committee to oversee the development, establishment and evaluation of the home birth program.
- Setting clear eligibility criteria for the program.
- Developing guidelines to determine when women should be transferred to hospital-based care.
- Enabling midwives who provide the home birth program to also work in hospital-based maternity services to maintain skills and relationships with in-hospital staff.
- Ensuring the availability of appropriate equipment to care for women in their homes.
- Ensuring that the equipment in the home birth kit is consistent with that used in the health service's hospital-based maternity services.
- Ensuring that midwives visit a woman's home prior to birth to assess its suitability for a home birth.
- Ensuring that the birth is attended by two midwives.
- Having processes and mechanisms in place to ensure quality, safe communication occurs during and around the intra-partum period between midwives providing the home birth program and with in-hospital staff.
- Conducting debriefs after every transfer and adverse event (including with Ambulance Victoria if relevant).

Example: Pilot site's steering committee*

Director of Obstetrics & Gynaecology

Director of Nursing & Midwifery

Operations Director

Midwifery Coordinator

Caseload Midwife

Quality Manager

Project Officer

Midwifery Unit Manager

Consultant Obstetrician

Consumer Representative

* Representatives of Ambulance Victoria were consulted during the planning and establishment phases.

The following key documents should support the program's operation and be regularly reviewed:

- Information sheets for women and general practitioners about the program and informed consent
- Self-assessment eligibility checklist for women
- A home birth policy and procedure manual for staff which includes protocols on:
  - eligibility criteria
  - admission to the home birth program
  - pregnancy care, referral and transfer
  - labour and birth care, referral and transfer
  - postnatal care, referral and transfer
  - home birth emergency transfer
  - refusal to consent
  - communication processes.

4.2.5 Assess organisational capability and capacity

The feasibility assessment may have highlighted areas where work needs to be done to enhance the organisation's capability or capacity to support a home birth program. Depending on the context, the commencement of a home birth program may be contingent on the rectification of an issue (for example insufficient staff with required skills).

The areas of organisational capability and capacity that are relevant to establishing a home birth program include:

- the current maternity service capability level and sustainability of the service
- the maturity of the clinical leadership approach and clinical governance
- a strong safety culture
- experience at delivering home-based services
- experience and success at the delivery of sustainable midwifery models
- the quality of the relationships between the disciplines and interdisciplinary care
- positive community engagement and relationship management.

4.2.6 Develop the service model

The key activities to develop the service model include: agreeing on the eligibility criteria, deciding on staffing models (as described below) and developing the clinical pathways and supporting guidance (which are covered in *Section 4.3: Providing a home birth program)*.

Eligibility criteria for a home birth program

A central part of any public home birth program is the eligibility criteria. Public home birth programs target women with low risk for complications, however there are differing views about the low risk.

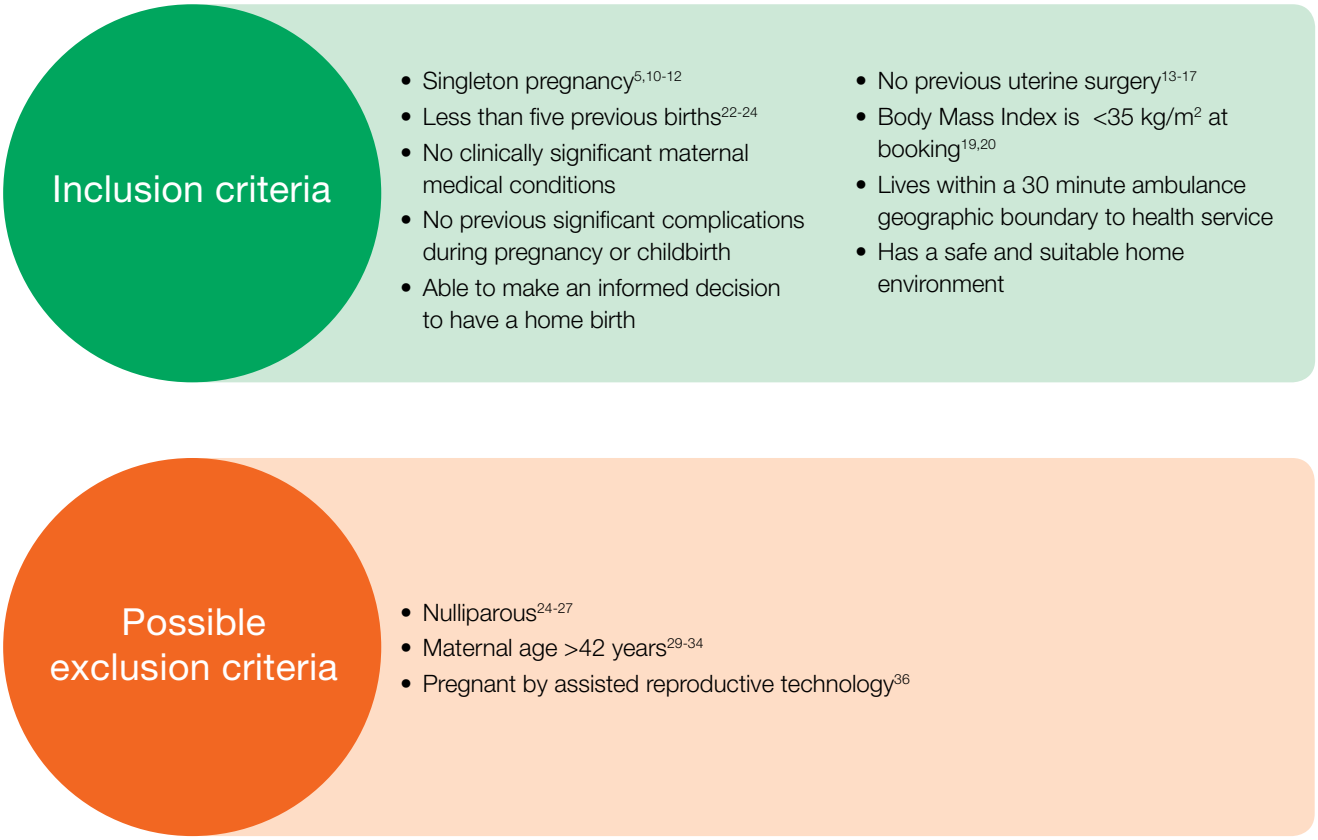
Public health services must develop eligibility criteria that are appropriate for their context as they are accountable for determining which women are clinically safe to enter their home birth program. Clinical risk must be assessed on an individual basis with each woman understanding that there may be factors in addition to the eligibility criteria that will form part of a clinician's assessment of a woman's eligibility for a program. Eligibility should also be considered in light of emerging evidence.

In line with good risk management principles, health services are encouraged to start the new service with a conservative approach to eligibility and may consider broadening criteria after a period of time when the experience and outcomes can be reviewed and assessed against demand and available resources.

Health services are advised to engage with relevant midwifery and medical staff during the development of the eligibility criteria to ensure that there is consensus amongst staff on who is safe to enter the home birth program. This will enable the eligibility criteria to be consistently communicated to women and applied in the same way by staff working in the home birth program.

To assist services, Figure 1 provides suggested inclusion criteria as a starting point. The criteria are based on the current literature, the experience of the two pilot programs in Victoria and the programs in other jurisdictions. In addition, Figure 1 provides possible exclusion criteria that health services will need to consider.

Figure 1: General inclusion and possible exclusion criteria



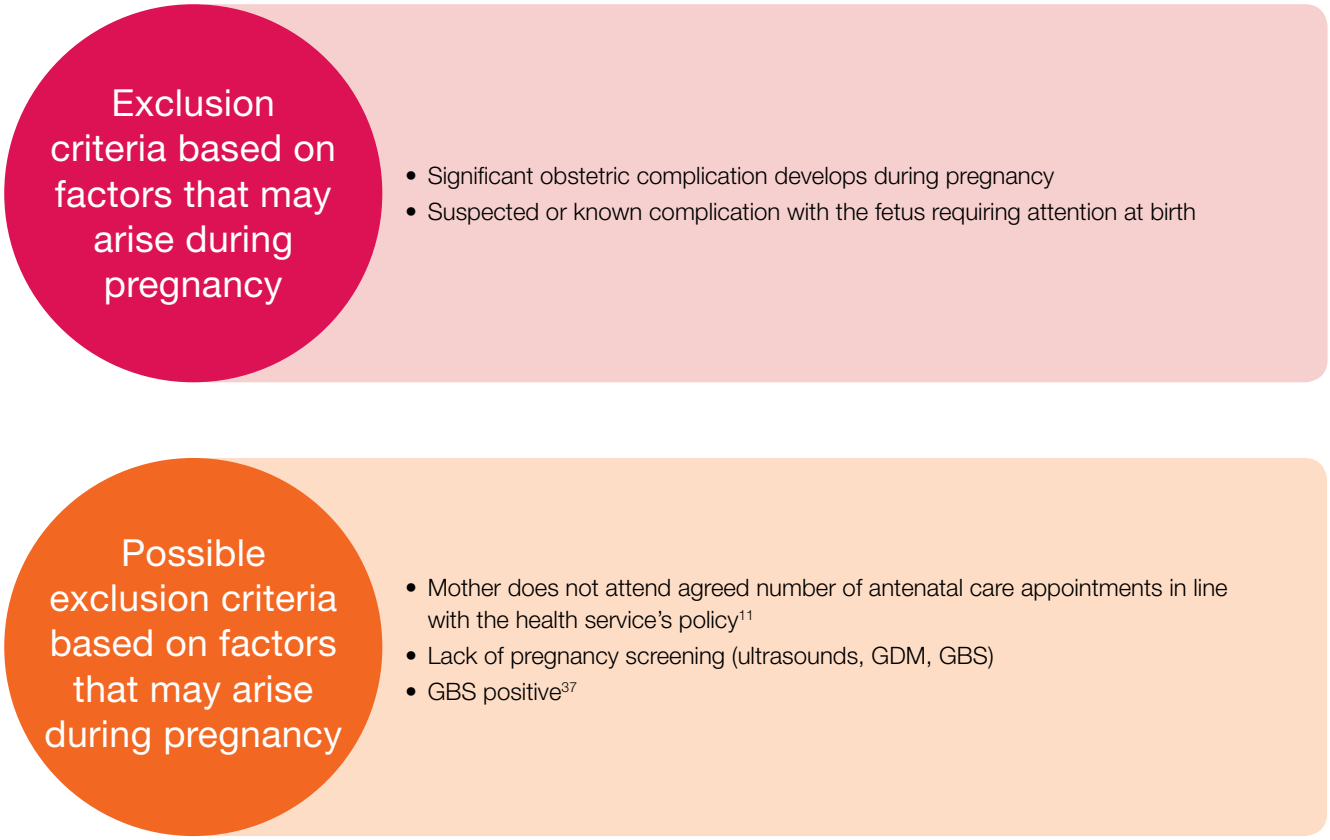
Transfer out of a home birth program in the antenatal period

As a pregnancy progresses, there may be circumstances that require a woman to be transferred from the home birth program to an alternative maternity care program. This includes situations where the clinical condition of the mother or baby changes, or more rarely, when the clinical staff feel the mother's level of engagement with the clinical team and the management goals increases the risk of an adverse outcome from a home birth.

As a starting point, Figure 2 provides suggested exclusion criteria based on factors that may arise during pregnancy. In addition, Figure 2 provides possible additional exclusion criteria that health services will need to consider.

Appendix 2 provides further information on the evidence and the range of conditions covered in Figures 1 and 2.

Figure 2: Exclusion criteria based on factors that may arise during pregnancy



Throughout all stages of pregnancy a woman should be provided with quality and consistent information and education about the risks to enable informed decision making. Complications or factors arising during a woman's pregnancy that may affect her eligibility for a home birth should be discussed with the woman and any decisions relating to a woman's eligibility for a home birth should be made in consultation with her.

Health services must maintain comprehensive records of all discussions and decisions relating to a woman's care and eligibility status. The decision to transfer a woman out of the home birth program should be clearly documented. Records of communication are important for health services and women and, where appropriate, should be provided to other relevant care providers such as general practitioners.

In any home birth program, it will be necessary for a proportion of women to be transferred to hospital-based maternity care. This may occur for a variety of reasons during the antenatal, intrapartum or postpartum periods. The evaluation of the home birth pilot program in Victoria found that 31 per cent of women at Casey Hospital and 23 per cent of women at Sunshine Hospital transferred to hospital-based care in pregnancy or labour.

For a woman who is transferred to a hospital-based maternity service model, health services should consider ways to maintain continuity of care, such as the woman having the same primary midwife, if this is her preference. It is recommended that health services establish a process for reviewing decisions that result in the transfer of a woman from the home birth program to a hospital-based maternity service model.

Case study: Change to eligibility in the antenatal period

As for all women planning a home birth, Ms B was informed at the beginning of her pregnancy that her eligibility for a home birth may change during the course of her pregnancy or at the onset of labour based on clinical and other risk factors.

At 21 weeks, Ms B developed high blood pressure and following investigation was diagnosed with pre-eclampsia. Ms B met with her midwife and an obstetrician at the health service to discuss the risks for her and her baby associated with pre-eclampsia and her care in pregnancy. Due to the risks, Ms B was advised she was no longer eligible for a home birth. Ms B was offered ongoing care with the health service's caseload midwifery team, which she welcomed. The health service wrote a letter to Ms B outlining her new care arrangements and placed a copy of the letter on her medical record.

The decision to change the plans for Ms B's labour and birth to hospital-based care was discussed at the health service's weekly Home Birth Program team meeting, attended by midwifery and medical staff. The transfer was also provided as part of the regular, routine report of outcomes of all women in the Home Birth Program to the health service's monthly Practice Improvement Committee.

Staffing models

An important planning question is how will the service be staffed? Caseload midwifery is recommended as the easiest staffing model for a home birth program. It facilitates a strong relationship between the woman and her midwife/s.[4, 5] The Victorian pilot sites consider this relationship to be central to providing a safe and effective home birth program.

Other issues to consider in relation to the staffing model are:

- Whether to establish the program within the existing midwifery workforce or recruit new/additional staff. There are advantages and disadvantages to both options. Midwives currently working in the health service will have the knowledge and experience of the health service's maternity services but may need additional training to be confident in providing home birth services. New staff, for example midwives who are currently working in private practice may be experienced in providing home birth care but will require additional training in health service procedures and guidelines.
- Ensuring midwives providing home birth care are competent and confident in core midwifery skills across the full scope of care (antenatal, intrapartum and postnatal) and know how to use these skills in a home-based setting.
- Ensuring 'back-up' systems are in place to manage midwife fatigue and availability.
- The degree of staff cross-over between home birth and hospital-based maternity services.

Staff training and competence

The delivery of antenatal, intrapartum and postnatal care in the home setting requires staff with a mix of skills and competencies to ensure that the care provided is of the highest standard. The setting itself may require adaptation of usual practices, procedures and policies from those used in the hospital setting. Therefore, the range of competencies and skills required by a midwife within the home birth program may vary from a similar role in the hospital setting and may be different from those required in hospital-based maternity services.

Health services should ensure that midwives are well informed of their obligations for providing care during the home birth that is consistent with the national professional standards for midwives and is within the scope and boundaries of clinical practice guidelines. To ensure midwives have suitable competence and skills to deliver high-quality, safe services in the home setting, health services should:

- develop position descriptions to define responsibilities, accountabilities and activities of midwives delivering care in the home setting
- appoint/recruit staff with the appropriate skills and competencies to reflect the autonomy of providing care in the home setting
- clearly define and communicate to staff their scope of practice and limitations of care relevant to the home birth program
- tailor staff training and competencies to the home setting
- consider any additional requirements for peer review and supervision to ensure the skills and competencies of midwives working in the home setting are maintained

To understand the initial training needs of staff providing care in the home setting, health services may need to undertake a skills gap analysis. The evaluation of the Victorian pilot program identified that multidisciplinary training sessions were highly successful, where midwives, medical registrars, residents and ambulance paramedics participated in simulations of potential emergencies that could arise during a home birth. The evaluation recommended that simulations be conducted once every three months for ongoing staff training with sessions covering procedures for teamwork, communication, management of postpartum haemorrhage and neonatal resuscitation.

In addition to orientation and education, there may be need to have targeted midwifery supervision and support (from a consultant level midwife for example).

Example: Integrating home birth care

At both Casey Hospital and Sunshine Hospital, caseload midwives provide care for both home birthing and non-home birthing women.

This ensures that the midwives work within a team environment and prevents staff in the home birth program from becoming isolated.

It also ensures midwives providing home birth care have an understanding of the full scope of the health service's maternity service and are well placed to support a woman who may need to transfer to hospital-based care at any point in her antenatal or intrapartum care.

Example: Simulated training sessions

The program at Casey Hospital delivered training sessions in a simulated home environment at the hospital and at the home of a staff member.

These were considered very beneficial.

4.2.7 Identify program resources and budget

As with other public maternity program activity, home birth services are delivered within the existing acute care funding streams. A home birth program budget needs to account for both costs and revenue for the antenatal, intrapartum and postnatal periods as well as any establishment costs.

The evaluation of the Victorian pilot program concluded that while start-up costs may be significant, ongoing costs are not dissimilar to standard hospital care and there may be opportunity for savings in relation to postnatal care, specifically 'in hospital' stays.

Potential establishment costs for health services to consider

The following start-up costs should be anticipated:

- Project management.
- Initial staff orientation, education and training. For example ensuring various clinicians within the health service are aware of the program and that staff working in the program are appropriately trained in areas such as clinical pathways, documentation and emergency scenarios.
- Communication and engagement activities.
- Equipment (clinical, logistic and communications) – refer to the section below on 'Specific equipment and technology'.
- Suitability assessment or equipment for a home-based service.

Operational costs for health services to consider

Home birthing programs may incur different costs than ward-based models and health services will need to consider the following:

- Staff costs for a home birth program may be higher than other maternity service models. The level of experience and subsequent pay rate for the midwives providing home birthing may be higher than in other maternity models. In addition, the time spent by staff with the women may be different.
- There are separate industrial arrangements for caseload midwifery. Health services should refer to the current enterprise bargaining agreement for nurses and midwives.
- Costs associated with travel to the woman's home for 1-2 midwives travelling together or separately for:
  - an appointment during the antenatal period (attended by 1 or 2 midwives)
  - attendance for the birth (attended by 2 midwives)
  - attendance for postnatal care (attended by 1 midwife).
- Costs associated with ambulance transfers for admitted women from home to hospital.
- Ongoing and refresher training for staff.
- Replacement of equipment (clinical, logistic and communications).
- Hire and delivery of oxygen cylinders to a woman's home.
- Costs associated with documentation and IT connectivity.
- Evaluation and program review costs.

Specific equipment and technology

Health services may wish to consider purchasing or leasing:

- Laptops (with consideration given to security associated with remote access to the health service network and electronic medical records).
- Mobile phones with top coverage (containing relevant numbers of senior clinicians for additional consultation and support).
- Vehicles for midwives attending home births.

In relation to birth pools, health services should consider if this will be provided by the service or if the pool will be the responsibility of women in the home birth program.

It is recommended that each midwife carry his or her own home birth kit. Health services should consider consulting with the Paediatric Infant Perinatal Emergency Retrival service and also refer to relevant health service guidelines about the resuscitation equipment required to support women at home.

In line with current recommendations from the Consultative Council on Obstetric and Paediatric Mortality and Morbidity, health services should ensure that a self-inflating bag is included in the neonatal resuscitation kit at every home birth, in the event of failure of the other resuscitation equipment[6].

The following are examples of the types of equipment that may be carried in the home birth kit:

- General equipment items (for example hand-held Doppler, syringes, blood tubes, needles, alcohol swabs and thermometer).
- Equipment needed for perineal repair.
- Equipment needed for Intravenous (IV) insertion and therapy.
- Equipment needed for resuscitation of mother and baby.
- Equipment needed for catheter insertion.
- Drugs such as oxytocin and vitamin K.
- Personal protective equipment to protect against exposure to bodily fluids including containers for appropriate disposal of syringes and transport of the placenta.

The pilot sites arrange for two oxygen cylinders to be ordered and delivered to a woman's home prior to the birth. They are then available for neonatal or maternal resuscitation if required.

Appendix 3 provides a sample home birth equipment list.

4.2.8 Develop a communication and engagement strategy

Engaging with the community

Health services will need to consider how and when they communicate with women and the community about their home birth program. Health services should ensure consistency in the information provided, in particular about the model of care, eligibility and the potential risks and benefits for women who may be eligible for a home birth. A communication and engagement plan may assist health services to define key messages and to identify the style and timing of various communication strategies such as community forums, newsletters, media releases or information sheets about the program.

Engaging with women

Women who are eligible and choose to have a home birth should receive clear verbal and written information about their care during their journey. Information should be based on the best available evidence and updated as new evidence emerges. Health services may consider a range of media such as handouts or fact sheets for women, webpages or articles.

Women should receive clear, high-quality information about:

- eligibility for a home birth and how eligibility may change during pregnancy
- the risks of giving birth at home
- the situations that may require an emergency transfer to hospital and what happens in the event of a transfer
- screening tests and appointments
- health service expectations of the woman.

Other considerations

Health services must ensure that their Poisons Control Plan aligns with current legislation and consider whether it requires updating to reflect the specific policies and procedures that apply to the home birth program.

4.2 Further resources

- *Victorian clinical governance policy framework,* DHHS, 2013 <http://www.health.vic.gov.au/clinrisk/publications/clinical_gov_policy.htm>.
- Nurses and Midwives (Victorian Public Sector) (Single Interest Employers) Enterprise Agreement 2012 – 2016 <http://www.health.vic.gov.au/nursing/workforce/ir>.
- *Patient transport charging guidelines for Victoria,* DHHS, 2014 <http://docs.health.vic.gov.au/docs/doc/Patient-transport-charging-guidelines-for-Victoria>.
- *National Midwifery Guidelines for Consultation and Referral 3rd Edition,* Australian College of Midwives, 2015 <http://www.midwives.org.au>.
- *Intrapartum care: care of healthy women and their babies during childbirth,* NICE clinical guideline 190, National Institute for Health and Clinical Excellence, 2014 <http://www.nice.org.uk/guidance/cg190>.
- *South Australian Perinatal Practice Guidelines – Planned Birth at Home in South Australia,* SA Maternal and Neonatal Clinical Network, 2013 <http://www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Clinical+resources/Clinical+topics/Perinatal+practice+guidelines/>.
- *Policy for Publicly Funded Homebirths including Guidance for Consumers, Health Professionals and Health Services,* Women's and Newborns' Health Network, Department of Health, Western Australia, 2013 <http://www.health.wa.gov.au/circularsnew/attachments/823.pdf>.
- *Poisons Control Plan,* DHHS, 2012 <http://docs.health.vic.gov.au/docs/doc/Poisons-Control-Plan-HSP-Part-1>.
- Drugs, Poisons and Controlled Substances Act 1981 <http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/PubLawToday.nsf/95c43dd4eac71a68ca256dde00056e7b/9a03a786fc12c4deca257d870003fc34!OpenDocument#>.
- Requirements for health practitioners further to drugs and poisons legislation would relate to clinical practice (such as the correct handling of drugs), which is regulated by the Health Practitioner Regulation Agency <http://www.ahpra.gov.au/About-AHPRA/Contact-Us.aspx>.
- *National Safety and Quality Health Service Standards,* The Australian Commission on Safety and Quality in Health Care, 2012 <http://www.safetyandquality.gov.au/publications/national-safety-and-quality-health-service-standards/>.

4.3 Providing a home birth program

This section covers the operational management of the home birth program across the care periods of antenatal (care during pregnancy to the onset of labour), intrapartum (care during labour and birth) and postnatal (care immediately after the birth and extending to six weeks). Figure 3 provides a summary of the key steps in a home birth program, focusing on where it may vary from hospital-based maternity care.

Principle 3

A home birth program is integrated into the health service's maternity service and appropriately resourced to provide high quality and safe care in a community context.

Principle 5

A home birth program is woman-centred and women are supported to make informed decisions about their own care and the care of their baby.

Health service guidelines

- Care provided as part of the home birth program is consistent with the health service's policies and procedures.
- Care is provided in the antenatal, intrapartum and postnatal periods according to documented care pathways.
- Health services consider the cultural and linguistic needs of women in their community to ensure culturally competent services are available to women.
- The recording of accurate, complete and timely information about a woman and her baby allows information to be shared between health professionals and supports the provision of safe and appropriate care.

Implementation guidance

4.3.1 Antenatal care

Antenatal care of women in a home birth program should be provided in accordance with the National Antenatal Care Guidelines[7], and the health service's existing antenatal care arrangements with the following recommended additional steps:

- The home environment is assessed to ensure it is safe and suitable for a home birth.
- Emergency resuscitation equipment (oxygen and suction equipment) is delivered to the woman's home prior to the commencement of labour.
- Health services consider the optimal number of antenatal visits required to establish a relationship with the primary midwife.
- The support midwife meets the woman at least once and provides antenatal care in the absence of the primary midwife.

4.3.2 Culturally appropriate care

To ensure equitable access to the home birth program for all women, health services should consider cultural competence at the organisational, structural and clinical level. An example of each level is provided below:

- *Organisational level:* cultural competence is embedded within a health service's quality improvement framework to build capacity at an organisational level.
- *Structural level:* women have access to readily obtainable, translated health information, including appropriate interpreting services (face-to-face or telephone) throughout the antenatal period.
- *Clinical level:* staff receive regular training and development to ensure they are culturally competent with knowledge of health issues impacting upon different population sub-groups, experience in comprehensive assessment and awareness of support services available for referral.

Health services should maintain effective linkages with support services and community-based providers of care, such as the Koori Maternity Service program, to ensure streamlined processes for referral and a seamless transition between services for women from culturally diverse backgrounds.

4.3.3 Advice on ambulance cover

As a woman who is having a home birth is an admitted 'patient' during labour, health services are responsible for the cost of an ambulance transfer from home to hospital if required in the admitted episode. Health services should inform women about their own liability for any costs associated with ambulance transport **outside** the admitted episode. Women also need to understand their options for covering the cost of transport should it be required (for example via a subscription to Ambulance Victoria, through certain private health insurance policies or because the woman is a concession patient).

4.3.4 Documentation

Health services should ensure there are policies and procedures in place to support midwives to maintain appropriate documentation. Every effort should be made to align documentation processes with existing hospital practices. This includes using the same hospital record as for the health service's other maternity services and providing patients with the Victorian Maternity Record (or equivalent) if used by the health service.

The following is a guide to the types of information that should be recorded in the patient record in addition to the information collected on a woman who is being cared for by the health service's maternity services:

- Discussions with the woman about giving birth at home.
- Discussions and details of counselling provided if a woman is to be transferred out of the home birth program and into hospital-based care.
- Advice provided to the woman about the need to go to hospital if complications arise.
- Discussions around informed consent including a woman's specific wishes and decisions.
- Details of the home assessment and discussions during the home visit.
- Meetings with support people.
- Discussions with relevant health care professionals regarding care of the woman and her baby.
- Discussions with the woman about the risks and consequences of refusing particular tests or treatments.
- Clinical observations, rationale and discussions when transfer to hospital-based care is clinically required or requested.

4.3.5 Intrapartum care

Health services must ensure that women know who to contact when labour commences and are provided with up-to-date details for all relevant contacts. Information about what to do in the case of an emergency or in the event that the primary midwife cannot be contacted should also be provided to women. Health services are responsible for providing a safe and timely response to women in labour. This includes having 'back up' systems in place to manage midwife fatigue and availability.

The intrapartum care pathway commences when a woman notifies the midwife that her labour has commenced. When the midwife arrives at a woman's home and labour is established, the woman becomes an admitted patient via a 'virtual ward'. Women admitted to a 'virtual ward' are under the care of the health service's birth suite and attending midwives. A key role of the primary midwife is to keep the woman informed of her progress in a timely manner to enable informed decision-making. The primary midwife is responsible for completing all documentation.

Accepted practice in home birth programs across Australia is that two midwives are required to provide safe care during the intrapartum period. The timing of when the second midwife is required to attend should be clearly defined in home birth policies and procedures.

The presence of two midwives at the birth will:

- provide support and clinical assistance in emergency situations
- provide an environment for consultation if a second opinion is required
- enable safe working practices for midwives
- provide capacity for documentation during the birth.

A woman is discharged from the 'virtual ward' at the time when the primary midwife determines that discharge is clinically appropriate in the circumstances and/or the woman and/or infant is transported to the relevant health service for admission.

4.3.6 Special considerations during the labour and birth care pathway

Management of the third stage of labour

Individual public health services are responsible for decisions regarding management of the third stage of labour. Currently, active management of third stage is not mandated by any public home birth model in Australia. It should be noted, however, that the Royal Australian and New Zealand College of Obstetricians and Gynaecologists recommends active management of the third stage of labour to reduce the risk of postpartum haemorrhage.[8]

Health services may consider whether having women agree to a managed third stage of labour is part of their eligibility criteria or whether women will have the option of a physiological third stage. Regardless, all women should be offered a managed third stage of labour.

Each home birth program must have protocols that provide guidance about the level of blood loss in a physiological third stage that indicates that a transfer to hospital is required. Health services should ensure that midwives are trained in managed and physiological third stages of labour as well as the estimation and monitoring of blood loss.

In line with coronial recommendations, health services must ensure that when a baby is born in poor condition at home and requires transfer or is unlikely to survive, the midwife sends the placenta for pathology examination.

Water immersion in labour and birth

Health services considering the use of immersion in water during labour or birth will need to consider any risks associated with water immersion and how those risks are communicated to women. Health services should develop clear policies that address factors relevant to the use of water immersion in the home setting, including assessing whether women are suitable for water immersion and what guidance is provided to women about the use of water immersion during their planned home birth.

In line with current recommendations from the Consultative Council on Obstetric and Paediatric Mortality and Morbidity, health services must provide clear guidance for managing the third stage of labour out of water to enable correct estimation of blood loss.[6] Blood loss estimation can be affected by water dilution, ambient lighting, bath colour, pool liner colour and the experience of birth attendants.

When a woman refuses care consistent with health service guidelines

A woman has the right to give and rescind consent at any time. Health services must ensure women are informed of the requirements of the home birth program and how a woman's decisions may influence her eligibility for the program. It is suggested that women are provided with information on the types of conditions or complications that may require transfer to hospital-based care.

Health services should develop clear policies to support midwives in the appropriate management of situations that are inconsistent with professional advice or standard practice. Examples include (but are not limited to) situations where a woman refuses care or declines the professional advice of the midwife. In some cases, refusal of care may result in a woman no longer being eligible for a home birth. It is the responsibility of health services to determine what circumstances may result in a woman no longer being eligible.

The role of Ambulance Victoria paramedics at a home birth

In the case of Ambulance Victoria attending the home of a woman in the home birth program, the Ambulance Victoria paramedic will work with the health service midwives to ensure safe and effective care. In the case of an obstetric emergency, the paramedics will usually assist the attending midwives. If the reason for the emergency call is not related specifically to the birth (for example cardiac arrest), the Ambulance Victoria paramedic will take the clinical lead with the home birth midwives assisting.

Transfer from home to hospital and escalation processes

For some women, transfer from home to hospital will be necessary. A transfer to hospital is not a 'failed' home birth.

Every public home birth program must have clear documented policies, procedures and processes to ensure the safe, timely and appropriate transfer of women from home to hospital if required at the onset of labour, during labour, or after birth. Specifically, the policies and procedures will:

- define what complications require transfer
- address the communication process between the midwives providing home birth and the hospital-based maternity service including escalation procedures
- ensure appropriate transfer arrangements, relevant to the level of risk and urgency are in place for all women should the need for transfer arise
- devise the necessary clinical pathways and guidelines to support all types of transfer
- ensure women are informed about the indications and possible need for transfer, including what will happen should she and/or her baby require transfer to hospital
- ensure timely review and reporting of all transfers.

Health services will need to consider the level of care they provide and whether there may be emergency situations in labour and birth that would require a woman to be transferred to a health service with a higher level of care. Where this is relevant, health services should consult with the receiving health service during the planning stage to clearly document processes and referral pathways.

Under the *Ambulance transport payment guidelines (2015)*, if an ambulance transfer is requested by the midwife (from home to hospital) during the admitted episode, health services are responsible for covering the cost of the transfer. In labour, women are admitted patients of the health service.

Appendix 4 provides an example set of transfer protocols and procedures.

When a woman refuses emergency transfer to hospital in active labour

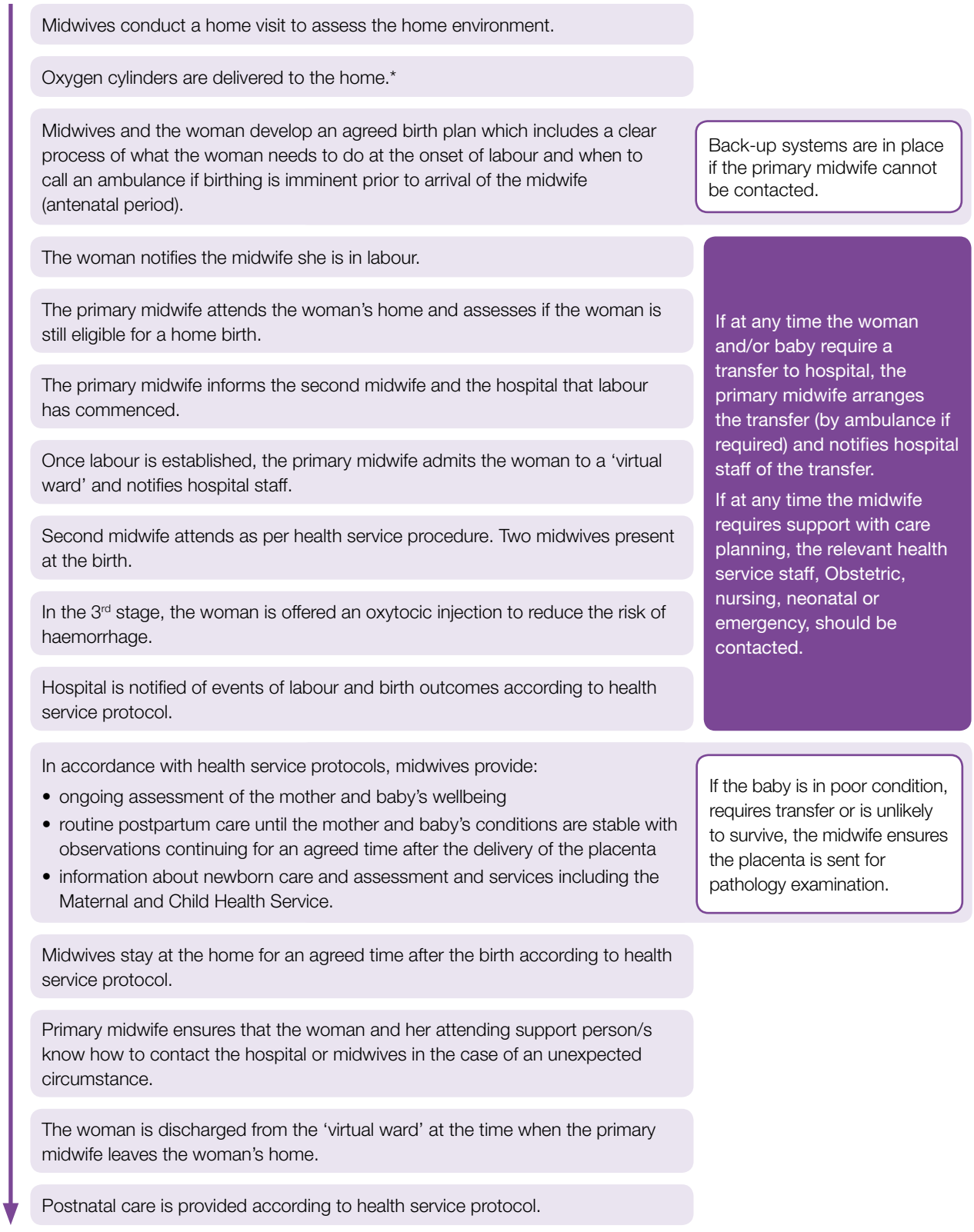
Home birth programs must have clear policies about staff actions where a woman refuses to transfer in labour including when to call an ambulance, the escalation process within the health service, care while awaiting transfer and documentation of events and discussions.

4.3.7 Postnatal care

The care of the mother and baby after the birth will be provided by the midwife in attendance at the home birth. The postnatal care for women in home birth is provided in line with the existing maternity service arrangements.

Health services should maintain effective linkages with support services and community-based providers of care, such as general practitioners and Maternal Child Health services, to facilitate timely access to postnatal care and a seamless transition between services following discharge from the home birth program.

Figure 3: Key steps in a home birth program



* By 36 weeks gestation (based on advice from the pilot sites).

4.3 Further resources

- *National Antenatal Care Guidelines*, Commonwealth of Australia, 2012 <http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-antenatal-care-index>.
- First Stage Labour and Birth in Water Policy, SA Health, 2010 <http://www.sahealth.sa.gov.au/wps/wcm/connect/ae527200465ec14d8572ff2e504170d4/Policy-FirstStageBirthInWater-SAHealth-20101221.pdf?MOD=AJPERES&CACHEID=ae527200465ec14d8572ff2e504170d4>.
- *Victorian Hospital Admission Policy,* DHHS, 2014 <http://www.health.vic.gov.au/hdss/vaed/index.htm>.
- Further details, including business rules for newborn reporting, are available in the VAED manual <http://www.health.vic.gov.au/hdss/vaed/vaed-manual.htm>.
- *Postnatal Care Program Guidelines for Victorian Health Services,* DHHS, 2012 <http://www.health.vic.gov.au/maternitycare/publications.htm>.
- Further information on the Victorian Maternity Record <http://www.health.vic.gov.au/maternitycare/victorian-maternity-record.htm>.
- Department of Health, 2015, *Ambulance transport payment guideline*. Victorian State Government, Melbourne <http://docs2.health.vic.gov.au/docs/doc/2015-Ambulance-transport-charging-guidelines>.

4.4 Data, reporting and monitoring a home birth program

Principle 6

A safe and quality home birth program is informed by data to drive service improvements and is evaluated regularly to ensure it is high performing and responsive to the needs of the community and key partners.

Health service guidelines

- An evaluation framework is established before a home birth program commences.
- Mechanisms for collecting, monitoring and reporting data are in place from commencement of the home birth program.

Implementation guidance

4.4.1 Data and reporting

The requirements for health services to report and monitor on relevant activity, quality and safety events for maternity services apply to those services delivered through a public home birth program.

The requirements that have specific relevance to home birth programs include: sentinel events and occupational violence through the Victorian Health Information Management System, the Victorian Perinatal Data Collection and the Consultative Council on Obstetric and Paediatric Mortality and Morbidity. These requirements are specified in the annual policy and funding guidelines published by the Department of Health & Human Services.

Reporting to the Victorian Admitted Episodes Dataset

In accordance with the *Victorian hospital admission policy,* a home birth is considered to be a planned, admitted maternity episode and therefore must be reported to the Victorian Admitted Episodes Dataset (VAED). The birth episode for the baby must also be reported to the VAED.

A home birth admitted episode should be reported to the VAED as outlined in Table 1.

Table 1: Home birth data items to be reported to the VAED

VAED data item	Suitable code	
Delivery episode		
Criterion for admission	O	Patient expected to require hospitalisation for minimum of one night
Admission type	M	Maternity
Accommodation type	4	In the home (HITH)
Program identifier	05	Home birthing program
Birth episode		
Criterion for admission	U	Unqualified newborn
Admission type	Y	Birth episode
Accommodation type	4	In the home (HITH)
Program identifier	05	Home birthing program

There are no specific Diagnosis Related Groups for home births.

4.4.2 Program evaluation

Health services should continually review and revise their service delivery models to ensure they are consumer-centred, evidence based and organised for safety.[9] Clinical data collection and monitoring of performance and patient outcomes for home birth should be embedded in the health service's usual processes for maternity services, but the episodes that relate to home birthing services should be considered specifically.

Initially it is recommended that monitoring and review of data – especially clinical outcomes, safety incidents and compliance with protocols – is formal, frequent and comprehensive, as this is a new service model. There should be a 'clear line of sight' to the health service executive on the program outcomes.

Periodic program evaluation is important for the department, agencies, clinicians and the community as it:

- demonstrates accountability
- ensures that there is transparency in assessing if a program is achieving its goal and objectives (and if not, why not?)
- determines whether programs are efficient and sustainable
- assists with future planning
- identifies opportunities for improvement.

Formal and informal approaches to evaluation of the program are recommended and health services may wish to develop audit tools specific to their health service or use validated tools.

Table 2 identifies how health services may monitor, review and evaluate their home birth program to allow continuous improvement of their model.

Table 2: Suggested frequency for monitoring, reviewing and evaluating a home birth program

Process	Suggested frequency
Debrief meetings between midwives and a consultant obstetrician	Following each home birth
Clinical audits	In line with health service policy
Clinical outcome data (maternal and neonatal outcomes, including outcomes of all transfers)	Monthly
Documentation audits and compliance to protocols and procedures	Annually or in line with health service policy
Meetings of staff	Monthly
Staff satisfaction surveys	Annually
Women's satisfaction – experience surveys	Ongoing – reported annually
Complaints and compliments	Monthly
Incident reports – safety reports	Quarterly
Review of identified 'near misses'	Monthly
Economic evaluation	Every two years or in line with health service policy

As public home birthing is a new maternity service model for Victorian health services, it is recommended that a formal program evaluation or review be undertaken between 18 months to two years after a program is established unless an earlier review is indicated by clinical outcomes or trends.

The proposed framework for evaluation should be developed before the service begins so the necessary data items are able to be captured and reported on.

4.4 Further resources

- The current version of the VAED manual <http://www.health.vic.gov.au/hdss/vaed/vaed-manual.htm>.
- *Policy and Funding Guidelines,* DHHS <http://www.health.vic.gov.au/pfg/>.
- Templates and guidance for reporting maternal and perinatal deaths to the Consultative Council for Obstetric and Paediatric Mortality and Morbidity <www.health.vic.gov.au/ccopmm>.
- The Victorian Perinatal Data Collection manual, including data definitions, business rules and submission guidelines <www.health.vic.gov.au/ccopmm/vpdc>.

5. Appendices

Appendix 1: Organisational readiness checklist

Key questions to consider in assessing organisational appetite and readiness for a home birth program	Self-assessment
Is the health service executive committed to a home birth program?	Yes ☐ No ☐ Unsure ☐
Are senior clinical staff committed to a home birth program?	Yes ☐ No ☐ Unsure ☐
Has the health service considered the governance arrangements for the home birth program?	Yes ☐ No ☐ Unsure ☐
Are midwifery staff interested in being able to offer a public home birth program?	Yes ☐ No ☐ Unsure ☐
Have midwives expressed an interest in adding home birth to their practice context?	Yes ☐ No ☐ Unsure ☐
Are staff from different disciplines committed to working together in a multidisciplinary team?	Yes ☐ No ☐ Unsure ☐
Has the local community expressed an interest in a home birth program?	Yes ☐ No ☐ Unsure ☐
Has the health service assessed the implications of offering a home birth program? How will any risks be addressed?	Yes ☐ No ☐ Unsure ☐
Have any issues with organisational readiness been identified? How will these be addressed?	Yes ☐ No ☐ Unsure ☐
Will a home birth program complement current care options? Will it be feasible?	Yes ☐ No ☐ Unsure ☐
Is the health service prepared to work with other health services and partner groups to implement a home birth program?	Yes ☐ No ☐ Unsure ☐
Does the health service have adequate financial and human resources to establish and operate a home birth program?	Yes ☐ No ☐ Unsure ☐
Will the health service support home birth midwives with the required education, time for training and normal processes such as peer review?	Yes ☐ No ☐ Unsure ☐
Will the health service allow time for staff to implement the program?	Yes ☐ No ☐ Unsure ☐
Is a home birth program supported under current industrial agreement arrangements?	Yes ☐ No ☐ Unsure ☐

Appendix 2: Evidence for determining eligibility criteria

To assist services to develop their home birth programs, a summary of the evidence underlying the common eligibility criteria is provided below. This information is provided as reference material and health services should consider this and other relevant emerging evidence in determining their criteria (both in the establishment and the operation phase).

Multiple pregnancies

Studies have consistently shown that twins are at increased risk of adverse perinatal outcomes compared to singletons.[10] Twins have higher rates of spontaneous preterm birth, intrauterine growth restriction and congenital abnormalities.

Mothers of twins are also at increased risk of anaemia, hypertensive disorders, haemorrhage and mortality.[10,11] Additional complications specific to twin pregnancies include conjoined twins, twin-reversed arterial perfusion (TRAP) sequence, monoamnionic twinning and twin-to-twin transfusion syndrome (TTTS).[12]

Multiple pregnancies are currently excluded from all public home birth programs nationally.

Past uterine surgery

While the absolute risks are low, women attempting a trial of labour who have had past uterine surgery (i.e. caesarean section) have been shown to have higher rates of uterine rupture and associated maternal morbidity, hypoxic ischaemic encephalopathy and perinatal mortality compared to women who have not had past uterine surgery.[13,14,15]

Specifically the risk of scar rupture has been estimated to be between 0.2 – 0.7 per cent.[13,14,15] The increased risk of adverse outcomes relate to failed trial of labour only. Among women planning a trial of labour the rate of success is estimated to range between 50 – 80 per cent.[15,16,17]

Women who have had past uterine surgery are excluded from all public home birth programs nationally.

Maternal medical conditions

A number of maternal medical conditions place both the mother and fetus at increased risk during or shortly after labour. Individual health services should refer to their specific policies and clinical guidelines, as well as the Australian College of Midwives National Guidelines for Consultation and Referral.[18]

Past obstetric complications

A number of past obstetric complications are likely to recur in subsequent pregnancies placing the mother and her baby at increased risk during or shortly after the birth. Individual health services should refer to their specific policies and clinical guidelines, as well as the *National Midwifery Guidelines for Consultation and Referral* (Australian College of Midwives 2013). Below is a list of past obstetric complications that a health service may choose to incorporate into their exclusion criteria. This is not an exhaustive list. Health services may identify additional complications.

- Postpartum haemorrhage
- Previous shoulder dystocia
- Previous retained placenta requiring manual removal
- Previous eclampsia/HELLP syndrome
- Previous autoimmune thrombocytopenia
- Previous ABO incompatibility
- Previous Rh isoimmunisation
- Previous acreta
- Previous serious psychological disturbance
- Previous trophoblastic disease
- Previous baby with GBS neonatal sepsis
- Any other significant previous obstetric event.

Maternal obesity

Maternal obesity is associated with increased risk of gestational diabetes, stillbirth, pre-eclampsia, thromboembolism, maternal mortality, and abnormalities in fetal growth and development. During labour, obesity is also associated with increased risks of prolonged labour and failure to progress, postpartum haemorrhage, shoulder dystocia, and difficulties monitoring the fetal heartbeat.[19] A recent systematic review has further confirmed a relationship between maternal obesity and fetal death, stillbirth, neonatal and perinatal death.[20]

The Victorian Maternity and Newborn Clinical Network (MNCN) have developed an obesity guideline to promote and facilitate standardisation and consistency in practice using a multidisciplinary approach.[21]

Women who are obese are currently specifically excluded from a public home birth in South Australia, Western Australia and at one Victorian site.

Parity

Grand multiparity: While not consistent, links between grand multiparity and medical conditions, placental abruption, preterm delivery, fetal macrosomia, neonatal death, postpartum haemorrhage and blood transfusion have been shown.[22,23,24]

Nulliparity: Findings from the Birthplace in England study showed that the risk of perinatal mortality and morbidity was only comparative between home and hospital birth among multiparous women, and when primiparous women were examined the risks of perinatal morbidity and mortality were higher in women planning to give birth at home.[25] Similarly, parous women, who planned to birth at home had a significantly lower risk of severe maternal morbidity compared to those who planned to birth at hospital in the Netherlands.[26]

Primiparous mothers are also more likely to transfer from home to hospital with 32 per cent of primiparous compared to 8.7 per cent of multiparous women transferred from home to hospital in the Birthplace in Australia study.[27] A recent systematic review has also identified a modest but significant increase in postpartum haemorrhage (PPH) among primiparous women.[24]

Geographical boundary

Health services should establish a geographical boundary for women accessing the home birth program to ensure the provision of safe and timely maternity care in the home, and timely transfer to hospital of the woman and/or her baby in the event transfer is required. The geographical boundary adopted by Monash Health and Western Health, and some other public home birth programs in Australia is that women must live no further than a 30 minute ambulance drive from the health service.

When determining a geographical boundary the following should also be considered:

- For certain emergency situations, women will need to be transferred from home to a different health service (due to the level of care they provide) and will need to consider how this distance is defined.
- The travel time for midwives providing home birth care (including backup midwives) to the woman's home.

Home environment

The home setting lacks the infrastructure, specialised equipment and regulation of a hospital setting and can be an unpredictable environment in which to provide health care.[28] Consideration of patient and staff safety is an essential part of delivering care in the home setting. Health services should ensure that an assessment of the woman's home (or other environment where care is planned to occur) is completed prior to acceptance into the home birth program. The assessment needs to identify any potential care and environmental risks. For example, to assess the safety and suitability of a home, health services may wish to check the cleanliness and hygiene, telephone coverage, vehicle access, and evidence of drug use or domestic violence.

The *Occupational Health and Safety Act 2004* governs safety in the workplace. The WorkSafe publication *Working safely in visiting health services* is specifically targeted at programs such as Hospital in the Home and provides a resource to identify potential risks in home-based settings to assist in the prevention of harm, for example injuries resulting from manual handling. Health services should conduct home assessments in accordance with relevant occupational health and safety standards for delivering care in the home. An example assessment tool is included in Appendix 5.

Informed consent

Health services have a responsibility to ensure that women have the capacity to give informed consent and have been provided with adequate information to make an informed choice about birthing at home. Discussions about consent should be appropriately documented in sufficient detail. This is of particular importance for health services wanting to implement a program that supports women from more vulnerable groups, such as those from a non-English speaking background or with a mental health problem.

Maternal age

Advanced maternal age is associated with pre-existing medical conditions, obstetric complications, and adverse labour and birth outcomes including fetal macrosomia, preterm birth, fetal death from intrapartum asphyxia at term, maternal mortality near misses and maternal death.[29-35]

The risk of congenital abnormalities also increases with advancing maternal age.[33]

Pregnancy from assisted reproductive techniques

A large number of studies have shown that assisted reproductive technique conceptions are associated with an increased risk of adverse obstetric outcomes. These include preterm birth, low birth weight baby/small for gestational age, admission to a Neonatal Intensive Care Unit and perinatal mortality for the baby and preeclampsia, gestational diabetes and a low lying placenta in the mother.[36]

Additional factors that may develop during pregnancy

In addition to the above criteria, health services should consider how they will address additional factors that may develop over pregnancy such as:

Obstetric complications

Obstetric complications that may develop in the current pregnancy that would exclude a woman from the home birth model include but are not limited to:

- abnormal placentation
- polyhyrdamnios or olighydramnios
- significant and/or recurrent antepartum haemorrhage
- gestational hypertension and/or pre-eclampsia/HELLP syndrome
- gestational diabetes requiring pharmaceutical glycaemic control
- cord prolapse
- acute fatty liver of pregnancy
- cholestasis
- significant perinatal mental health issues
- suspected macrosomia (>4000g).

Fetal reasons

Any known or suspected fetal condition or abnormality requiring paediatrician attention at birth.

Lack of antenatal care

Care during pregnancy is important in the identification of pregnancy complications, illness and health problems. Where women first present for antenatal care late in gestation there are poorer outcomes.[11] Health services may want to consider a minimum number of antenatal appointments attended by the home birth midwives or maximum gestation booking date.

Individual health services should refer to their specific policies and clinical guidelines regarding pregnancy tests and screening requirements and determine if completion of the tests is an inclusion criterion. In particular health services should give consideration to the necessity of gestational diabetes screening, ultrasounds for dating and ascertainment of location of placenta and Group B streptococcus (GBS) screening and treatment. To date there is conflicting data over the optimal approach and effectiveness of intrapartum antibiotics in preventing GBS infection.[387]

For women accepted into a home birth program, eligibility may change during the course of pregnancy or at the onset of labour based on clinical and other risk factors. In these circumstances, care will be transferred to the hospital setting.

Appendix 3: Sample home birth kit equipment list

Birthing kit

Aprons x 2
Disposable birthing bundle
Cord clamps x 2
Amnicot x 2
Amnihook x 2
Obstetric cream
Small infectious waste bag x 2
Non sterile combine x 20
Lactate strip x 2

Suturing kit

Disposable suturing kit
2-0 vicrylrapide x 3
2-0 polysorb x 2
Lignocaine 1% 200 mg in 20 ml x 2
20 ml syringe x 2
Infiltration needle x 2
Apron x 2
Packet 5 sterile abdo sponge with tape x 2
Sterile huck towel x 2
Sterile aqueous chlorhexadine irrigation x 4
Packet KY gel x 2
Ice packs

IV insertion kit

Sterile IV insertion kit
Tourniquet x 1
16 g + 18 g InsyteAutoguard Cannula x 2
IV extension set x 2
IV extension with non-return valve and additional port x 2
Small tegaderm x 4
10ml Syringe x 4
20ml Syringe x 2
Blood tubes FBE x 2, G&H x Pink
N/S 0.9% for injection 10 ml x 10
Sterile pressure pad x 5
Tape x 1

IV therapy kit

1,000 ml 0.9% Normal Saline x 2
1,000 ml Compound Sodium Lactate x 2

General additive label x 1

Primary IV administration set x 2
Blood/solution infusion set with pump chamber x 1

IV/IM equipment

Syringes 1 ml, 3 ml, 5 ml, 10 ml x 10 each
Needles 25 g, 23 g, 21 g, 19 g, x 10 each
Alcohol swabs x 10
Sterile pressure pads x 10
Vacutainer and needles x 5
Tenderfoot lancets x 5
Neonatal Blood tubes FBE, G&H, SBR, U&E
Pathology forms

IDC kit

Sterile catheter pack x 1
12g foley catheter x 2
Sterile closed system urine drainage bag x 1
Chlorhexadine irrigation solution 30ml x 2
Sterile KY gel packet x 2
Sterile water for injection 10ml x 1
Sterile urine specimen container x 1

Resuscitation equipment

Oxygen cylinder x 2 (delivered to the home)
Neopuff tubing and masks
Oxygen tubing x 3
Suction tubing x 2
8f, 10f, 12f, 14f suction catheters x 2 each
Yankauer sucker x 1
Adult Hudson mask x 1
Guedel airway adult and neonatal 3/4/00/01/1

Drugs

Syntocinon 10iu x 5
Syntometrine x 1
Ergometrine 500 mcg x 1
Misoprostil 200 mcg x 5
Paediatric Phytomeniodone 2 mg/.2 ml
Paediatric Hep B vax x 1
VoltarenSupp 100 mg
Citravescent sachet x 5
Vitamin K

Documentation

Partogram
Birth and postnatal hospital care plan
Adult medication chart
Neonatal record
Fluid balance chart
Neonatal feed chart
Domiciliary risk screen forms
Tape measure
Temperature probe covers
Intravenous therapy chart
Progress notes x 4
Telephone record of contact
Maternal Child Health book
Centrelink and birth registration forms

General items

Non-sterile gloves small and medium x 1 box each
Sterile gloves sizes 6, 6.5, 7, 7.5, 8 x 5 each
Speculum medium disposable (replaced if used)
Tuffy wipes packet x 1

General equipment repeated patient use

Neopuff with bracket
Laerdel bag and mask adult & neonatal (replaced if used)
Sonicaid
Baby scales and bag
Sphygmomanometer portable
Stethoscope
Digital thermometer
Sharps container
Pinnards stethoscope
Home birth kit box
Phone
Car lease
Laptop computer

Appendix 4: Sample transfer indications and protocols

	Suggested indications for transfer from home to hospital
Prior to or during labour	Mother's request
	Onset of labour before 37 weeks
	Onset of labour after 42 weeks
	Maternal active herpes infection at onset of labour
	Any indication for continuous monitoring as per the RANZCOG Intrapartum Fetal Surveillance Guideline[38]
	Evidence of maternal infection or temperature
	Failure of engagement of the fetal head despite active labour
	Prolonged rupture of membranes
	Meconium stained liquor
	Umbilical cord prolapse
	Suspicious fetal heart rate abnormalities
	Intrapartum haemorrhage
	Prolonged 1st stage of labour
	Prolonged 2nd stage of labour
During the birth	Shoulder dystocia
	Hypertension
	Postpartum haemorrhage
	Retained or incomplete placenta
	Maternal collapse
	3rd or 4th degree perineal tear
	Uterine prolapse or inversion
	Postpartum persistent hypertensive condition
	Group B streptococcus positive refusing antibiotics
Neonatal indications	Apgar score <7 at 5 minutes
	Prolonged or ongoing neonatal resuscitation problems
	Evidence of neonatal seizure activity
	Low birth weight <2,500 g
	Neonatal temperature <36.5 of above 37.4°C on more than one occasion
	Abnormal neonatal observations on more than one occasion
	Fetal death in labour
	Abnormal findings on physical examination
	Birth injury

Example: Procedure for urgent transfer (maternal and fetal)

Once the midwife has identified an emergency requiring urgent transfer to hospital the midwife will make two phone calls:

1. To Ambulance Victoria (Dial 000) to initiate transfer to the health service. Where the transfer is 'life threatening' the transfer should be to the nominated emergency department.
2. To the relevant health service manager, for example birth suite midwife in charge or consultant obstetrician on duty for assistance with care planning if required. The relevant health service manager is then responsible for ongoing site communication to the relevant teams such as obstetric, nursing, neonatal, emergency.

A team debrief should be undertaken after each transfer.

Example: Procedure for urgent transfer (neonatal)

Once the midwife has identified an emergency requiring urgent transfer to hospital the midwife will make three phone calls:

1. To Ambulance Victoria (Dial 000) to initiate transfer to the closest health service.
2. To the relevant neonatal service manager. The relevant manager is then responsible for ongoing site communication to the relevant teams such as senior or consultant neonatologist or paediatrician.
3. To the paediatrician on duty for assistance with care planning if required.

The mother should be transferred with the baby. A team debrief should be undertaken after each transfer.

Example: Procedure for non-urgent transfer

Once the midwife has identified a non-urgent indication requiring transfer to hospital the midwife will make two phone calls:

1. To Ambulance Victoria (Dial 000) to initiate transfer to the health service if ambulance transfer is to be used. Non-urgent transfers may also occur in the private vehicle of the woman in certain circumstances.
2. To the relevant health service manager. The relevant health service manager is then responsible for ongoing site communication to the relevant teams such as obstetric, nursing, neonatal, emergency.

A team debrief should be undertaken after each transfer.

Appendix 5: Sample home visit risk assessment form

Western Health

Women's & children's home visit risk assessment form

Patient's Preferred Name: _____

Patient Telephone Number confirmed: Yes ☐ No ☐ If no: _____

Patient Address Confirmed: Yes ☐ No ☐ If no: _____

Interpreter Needed: Yes ☐ No ☐ Language: _____

Ward: _____ MELWAYS REF: _____

Carers Name & Relationship: _____ Contact Number: _____

A. Patient History (file review)	Yes	No	Action
Does the occupant have a documented history of aggressive/offensive behaviour?			If yes, discuss with manager.
Is the client/occupant a drug/alcohol user?			Type: Quantity: Time of day:
Does the client have a documented psychiatric disorder?			If yes, state.

B. Accommodation (please tick)
House ☐ High Rise Complex ☐ Single Storey ☐ Double Storey ☐ Level _____
Flat / Unit ☐ Lift ☐ Stairs ☐ Single ☐ Double Storey ☐ Level _____

C. Access to Property	Yes	No	Action
Is the house visible from the street?			Obtain specific directions or location.
Is the house number visible from the street?			Temporary sign to be placed.
Is there close vehicle access to the residence?			
Is the path leading to the residence in good condition?			Assess the access for risks, take caution when entering.
Is there a locked gate / intercom to gain access to property?			Use intercom or ring on arrival to be let in.
Which door is used for entry			Front ☐ Back ☐ Side ☐ (please tick)
Is there unrestricted free parking?			

D. Occupants	Yes	No	Action
Does the patient have any pets?			List:
Do the animals need to be isolated or restrained during the staff visit?			Place elsewhere i.e. backyard
Do staff need to phone ahead to allow for removal of animals?			

Other issues: _____

_____

Home Visit Rating: _____

1. Low risk – visit to proceed
2. Conditional visit – refer to actions column
3. Unacceptable risk – home visit not to proceed
   Consider: - extra night stay
   - return to ward for visit

Completed by:

Name: _____

Sign: _____ Date: ____/____/____

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