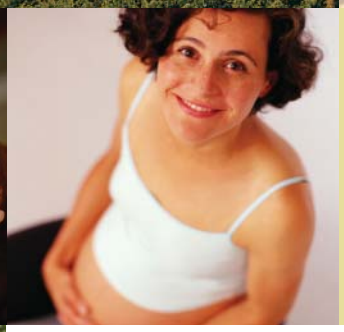
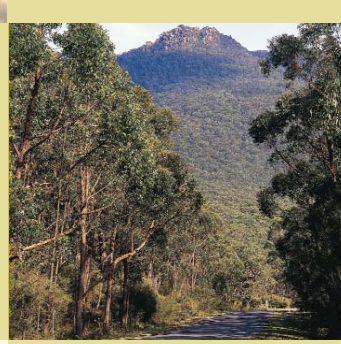
Rural birthing services

A capability based planning framework







Victoria
The Place To Be

Rural birthing services

A capability based planning framework

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Foreword

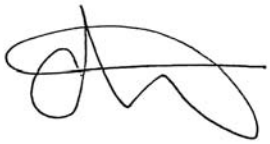
The Department of Human Services supports high quality birthing services provided in health services throughout rural areas. Demographic change, changes in expectations, technology and models of care offer both opportunities and challenges to health service providers in rural settings throughout the world. This framework is an important step in the ongoing planning and support of these services in a uniquely Victorian way.

The framework outlines the key principles underpinning the provision of a safe and effective birthing service and provides direction for health services in developing the standards and practices required. The framework will assist rural services plan to provide a service appropriate to their individual circumstances. It provides the impetus for all clinicians and practitioners involved in a birthing service to work together to determine the level of care offered in their community and to put the structures and guidelines in place to ensure this meets quality standards.

This capability based planning framework is the first in an ongoing program of work, initiated by the Rural Health Services Branch and developed in consultation with key stakeholders, to assist rural health services plan clinical service mix and provision into the future.

I thank all those who have contributed to the development of the planning framework, in particular the members of the expert reference group.

The Rural Health Services Branch is now keen to work collaboratively with health services, clinicians and regional colleagues to achieve the goal of providing safe and sustainable birthing services for women and families in rural Victoria.



Dr C W Brook
Executive Director
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Introduction

The Victorian Government is committed to the continuation of the safe and high quality birthing service provided throughout the state. This is an essential component of a comprehensive health system designed to meet the needs of rural and regional communities.

To support this objective, a planning framework has been developed which defines optimal services in terms of levels and outlines the minimum standards required to achieve each level. The framework focuses on the designated levels of care and roles for rural and regional health services in the provision of a coordinated service system.

This framework is one part of the comprehensive health service planning process for rural and regional Victoria. It complements the area-based service planning being completed at regional and sub-regional level, to ensure an appropriate and sustainable spread of clinical services throughout rural Victoria.

For the purposes of this document, the term 'birthing' is intended to encompass not simply the process of birth, but also the extended care of women and their babies required both before and after the birth event.

The planning framework assists rural health agencies to make decisions on the structure and appropriateness of their birthing services. The framework is relevant to all rural services, from small local centres to large regional hospitals. While the levels of service complexity and acceptable risk can be expected to vary over the range of hospitals, in each case, the birthing service provided should operate within the recommended framework.

The development of the criterion-based planning framework recognises the work undertaken in Queensland, as outlined and proposed in the *Service Capability Framework.*[1]

The criterion-based planning framework was first developed in 2003, with the proposed approach outlined in the *Rural Birthing Services Discussion Paper* of September 2003.[2] Following feedback received, and with the assistance of an Expert Reference Group, these initial criteria have now been refined and enhanced.

Context

It is important for women to be able to receive antenatal and postnatal care close to where they live and to give birth within their own local community, as much as possible.

Over the last five years the number of babies born to women residing in rural and regional Victoria has been over 15,500 per year. The majority of these births, or over 79 per cent, occur in either large regional centres or sub-regional health services, with over 300 births per annum and full obstetric services available. A number of these hospitals also provide comprehensive neonatal support, with level 2 special care nurseries.

A further 14 per cent of births are supported in other sub-regional and local community hospitals, providing support for over 100 births per annum. A proportion of births also occur in metropolitan health services. These are attributable to a combination of women in rural fringe areas who live close to a metropolitan hospital and those attending metropolitan health services for tertiary level care.

In rural and regional Victoria, a significant number of health services provide for less than 100 births per year, with no evidence of poor outcomes due to limited throughput. These services are important to their communities, as many are in isolated areas of Victoria, or areas with a comparatively low population and limited availability of other options for health care. The health service also provides important benefits to the community, with provision of birthing services being significant, as this can have an impact on the service's overall ability to attract and retain clinical staff. However, it must be acknowledged that some of these smaller services face decreasing service demand and workforce pressures. Therefore, the continued provision of a birthing service faces the challenge of balancing access, high quality services and cost-effectiveness considerations.

The most important issue for both mothers and their babies is a safe and quality outcome. A review of available statistics and literature published over the past five years indicates that the outcomes for women and babies is not compromised by provision of birthing services in smaller hospitals. However, evidence indicates that these services should be available for low-risk pregnancies only, with referral to alternative services where indicated. In these cases, antenatal care and effective monitoring and management of pregnancy is essential to support appropriate referral. [3, 4, 5, 6]

Health service plans are reviewed and updated on a regular basis, to ensure services provided are consistent with the hospital role and clinical best practice and accurately reflect demand within the catchment community. While the board of management of a health service has the responsibility to make these service decisions, it is important that decisions are not made in isolation, but within a consistent and accepted framework. By supporting health services to identify their role in the provision of a comprehensive birthing service within an area, the implementation of this framework will also foster the continued development of collaborative relationships between health services.

Objectives

The objective of the planning framework is to outline a transparent planning approach for service providers, consumers and the Department of Human Services–one that is based on service capability. The framework addresses the basic issue facing health services in rural areas–what level of birthing service is sustainable, both now and in the future?–with four service levels described. To assist health services to make an informed decision, the framework defines the minimum standards in terms of structures, protocols and service arrangements that need to be formally put in place to ensure service continuity at each level.

The planning framework is not volume-based, so will not rely upon numbers of patients treated, number of births, or size of population serviced. The framework aims to encourage a more consistent approach to clinical risk assessment and risk management and the provision of care in a setting that will ensure optimal patient safety and outcomes and reduce health service and clinician risk. The desired outcome is the safe management of pregnancy, labour, birth and postnatal care, with the minimisation of avoidable adverse events.

It will be essential for each health service to identify the level of risk acceptable to their own particular circumstances and to ensure strategies are in place to manage both expected and unexpected transition along the risk continuum.

Future directions for Victoria's maternity services

In June 2004, the Government released *Future directions for Victoria's maternity services.*[7] The purpose of initiating this statement is to offer a leadership role in setting an agenda for future directions in birthing services throughout Victoria. The statement sets out a framework for gradual but strategic changes that will guide service developments over the next 5 to 10 years.

The aim is high quality birthing services, where providers work with a collaborative approach and where women are informed and have choices, with women the focus of maternity care. The statement reiterates the Government's support for the continuation of birthing services in rural areas, balancing safety concerns with ensuring care is provided as close as is feasible to where women live.

The statement recognises that pregnancy and childbirth, while requiring quick and highly specialised responses to complications, are a normal physiological process. It acknowledges that obstetricians and general practitioners are fundamental to high quality care, but the average woman experiencing an uncomplicated pregnancy does not require ongoing specialist supervision.

With the focus on women rather than on health services, three levels of care are defined:

- Primary (provided by midwives and/or GPs for women with low-risk pregnancies)
- Secondary (involving specialist medical care for moderate complications)
- Tertiary (multidisciplinary specialist care for complex cases, to be provided by the Royal Women's Hospital, Mercy Hospital for Women and Monash Medical Centre).

Primary maternity services are a fundamental element of care throughout Victoria. The vision is for all Victorian women to have access to primary maternity care, unless their circumstances warrant transfer or referral to secondary or tertiary level services. This may be provided at the same hospital, or through a woman's transfer to another hospital during the pregnancy.

In this context, rural and regional services would be expected to offer a mix of either primary or secondary care, depending on patient need and choice and service provider availability.

Other projects, initiatives and ongoing mechanisms to support implementation of *Future directions for Victoria's maternity services* include:

- Perinatal Emergency Referral Service (PERS)–coordinated access to tertiary expertise when required
- Victorian Maternity Record, to enhance communication between maternity care providers and to involve women in their own care
- a range of initiatives as part of a rural workforce strategy, including recruitment strategies for obstetricians, general practitioners and anaesthetists, alongside additional retention and training for rural practitioners

- specific maternity services training programs:
  - practice development program for midwives
  - multidisciplinary training for obstetric emergencies (using a clinical risk management philosophy of "the team that works together trains together")
  - fetal surveillance education and credentialing program
- annual reports provided to every hospital in the state on outcomes and performance of maternity services, to support and underpin clinical review and quality improvement.

Models of care

The focus of this planning framework is on the level of care provided at each health service. The framework does not propose or support any particular model of care for birthing services, but will complement various models:

- midwifery caseload models
- shared care or collaborative arrangements with midwives and GPs
- models where GP obstetricians and specialist obstetricians are major providers of care.

Particular models of care are defined in the *Future Directions of Victoria's Maternity Services*.

Other work which supports *Future Directions includes the Rural Maternity Initiative*,[8] a project to encourage the development of models of care that provide women in rural and regional Victoria with increased access to continuity of midwifery care, thus increasing service options. The project supports collaboration between obstetricians, general practitioners and midwives to provide high quality safe maternity care and continue to increase childbirth options for women throughout Victoria. The project also supports the development of models that ensure a known midwife is the consistent carer through the continuum, either as the main care provider or in a shared care role.

The project commenced in 2003–04, with funding of $4 million provided to support the initiative over four years. The project plan is to provide funding support for a limited number of health service models in the first instance, with increasing participation in this type of model of care over the following years.

Decision making: health service governance

Health service boards of management should have a clear understanding of the priority health needs of their local community and whether or not the expectations thus generated can be met by the local health service. The decision about whether or not a birthing service is to be provided should therefore be made by each health service board. This recognises the responsibility of hospitals to make decisions about the service mix which will best meet the current and forecast needs of the community they serve.

Decision making must take into account what services are available in the region and in the immediate catchment area. It is important that the services planned are those that will best meet the identified needs of the local community, so the population profile will assist in determining the service profile.

Health service boards must also ensure decisions are made in the context of the health system as a whole and require the development of relationships and formal documented referral and transfer arrangements with other health services in the sub-regional and regional area. Local decision making, after consultation and agreement with other health service providers, stakeholders and the Department of Human Services, is designed to ensure the best outcomes for patients, staff and the community.

With local decision making also comes accountability. Health services will need to respond to the identified criteria, by taking steps to achieve the standards set, or by electing to modify the services offered. The framework recognises that there are different service configurations throughout the state and thus provides some flexibility to meet local community requirements. However, where there is a clear departure or variation from the recommended framework, the health service is expected to develop an appropriate risk management strategy.

Community consultation

It is essential that women, their families and the community know and understand what level of care is offered at the local health service. It must be well understood what services are available and those that may not be available, such as epidural anaesthesia and caesarean section. Women and their families must also be aware of the referral hospital that is able to provide a more complex level of care and of the transfer protocols and processes involved. This is an important part of antenatal care planning and education.

The adoption of a criterion-based framework enables rural hospitals to demonstrate to their local communities that the services they provide are of an accepted and appropriate standard. Where a health service decides to implement or change admission criteria for birthing services, the hospital must ensure that there is consultation involving the staff, other local health service providers (such as GPs) and the community. Other interested stakeholders may include GP divisions and the Rural Ambulance Service. Where health services have a community consultative committee in place, communication could be facilitated through this committee. Alternatively, the health service should develop a community awareness and education program.

Further information about how community consultation can assist service planning in rural and regional communities can be obtained through the publication *A guide to community consultation in rural and regional communities*.[9]

Service planning

While a maternity service is an important component of a comprehensive health service, it is not a major component of service delivery in many rural hospitals. The service constitutes up to 10 per cent of separations in a couple of hospitals, but the rural average is about five per cent of both separations and patient days. While volume is not the only indicator, an important consideration for health services is therefore the long-term sustainability of a birthing service. The population mix and current service trends will give some indication of future sustainability, particularly to determine if demand is increasing or decreasing.

The decision to provide an obstetric or maternity service can have an impact on the viability of the total health service and recruitment of medical and nursing staff, where the ability to attract and retain staff is linked to the provision of a range of services. The link between birthing services and other procedural work is important, so any potential limits to these services can endanger the viability of the hospital, if this impacts on retention of clinical staff.

Where small hospitals have dedicated resources for maternity services, such as an identified unit or ward area, this can impact on service flexibility and the ability to respond to changing service demand over time. Depending on local need, the beds and theatres may be better utilised for a broader range of patient needs. Hospital redevelopments need to be cognisant of this when reviewing the service requirements and the physical design and layout of the hospital.

Potential planning decisions to relocate or consolidate services to a larger neighbouring centre must be made with the input of all affected parties–it cannot be made by one health service in isolation. The financial implications on all effected services must be analysed and long-term impacts considered. The cooperation of affected staff to ensure maintenance of services is also critical, with changes to working relationships and potential industrial impact being important considerations.


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Planning framework

The planning framework has two components. Four service levels are identified, with the minimum standards for an appropriate service at each level then defined according to five criteria. The ability of each individual agency to offer a safe birthing service of a certain level depends on the ability to meet these criteria. In the event that a health service is unable to meet one or more of the criteria for a given level of service, the planning decision is whether to change the level of care provided, or take management action to ensure that the criteria are met. This decision can only be made on a case-by-case basis and in consultation with the department.

Service levels

The four service levels apply to individual health services. In the case of a multi-campus health service, each campus would need to have a level of care defined.

These are:

Level 1: Antenatal and postnatal education and support only, with no birthing service.

Level 2: Support for low-risk, normal and assisted births only. No provision for caesarean section or complex operative delivery.

Level 3: Full birthing services, including caesarean section and complex operative delivery.

Level 4: Full birthing services, including caesarean section and complex operative delivery. A Level 2 special care nursery is available to provide additional neonatal support.

As indicated, the major focus of all health service levels in rural Victoria will be on primary and secondary type care. On a statewide basis, super specialist or tertiary obstetric and neonatal services are provided by The Royal Women's Hospital, The Mercy Hospital for Women and Monash Medical Centre, with the Royal Children's Hospital also providing tertiary neonatal services. It is not envisaged that tertiary services will be available in rural and regional health services.

Service criteria

The minimum standards for each level are defined according to five criteria:

1. **Catchment area of the health service**
   - demographic mix
   - service accessibility.
2. **Clinical staff**
   - minimum staffing arrangements, including medical, midwifery and allied health staff
   - education and training to maintain skill levels.
3. **Clinical guidelines**
   - determined in accordance with conditions and services at each hospital
   - based on complexity of service delivery
   - includes patient referral and transfer protocols.
4. **Quality standards**
   - clinical risk assessment
   - clinical governance
   - credentialing and defining scope of clinical practice
   - informed consent.
5. **Support services**
   - infrastructure, equipment and support services required.

Criteria for rural birthing services

The planning framework provides detailed criteria for each level of care, with variation in the requirements depending on the service level provided.

The criteria are summarised in tabular form for each level, in Appendix 1

1. Catchment area of the health service

This criteria has two parameters of volume and access:

A. Examination of the demographic mix of the catchment population and projections of service demand over the next 5 to 10 years. While the planning framework does not prescribe minimum numbers of births, this analysis of total service demand will help to determine which level of birthing service will best meet community needs.

B. This analysis must also consider access to alternative services, including the distances involved and the capacity of the community to travel to these alternative hospitals. It must also consider the balance between the higher service level of a larger centre and the potential risk of longer travel time required for access.

2. Clinical staff

The numbers defined for medical, midwifery and allied health are the minimum required at each level of care.

Medical practitioners

Level 1: Antenatal and postnatal only

Hospitals offering this level of birthing service must have as a minimum:

- At least one general practitioner, to provide medical input as required. The GP must be appropriately credentialed and have scope of clinical practice defined for antenatal and postnatal obstetric and neonatal care. DRANZCOG training is desirable.

Level 2: Low-risk normal births only

Hospitals offering this level of birthing service must have as a minimum:

- One or more general practitioners available to provide medical care. These GPs must be readily available, with appropriate on-call arrangements.
- The GPs must be credentialed and have scope of clinical practice defined for obstetric and neonatal care. DRANZCOG training is desirable.
- A specialist obstetrician and specialist paediatrician may provide sessional consulting to these health services and be available for telephone consultation.

Level 3: All births including caesareans

Hospitals offering this level of birthing service must have as a minimum:

- One or more medical practitioners available with credentials and scope of clinical practice defined in obstetric care to provide for both normal and complex operative deliveries. This includes specialist obstetricians as defined by RANZCOG, GP obstetricians or general surgeons able to provide for caesarean sections.
- One or more qualified anaesthetists or medical practitioners available with appropriate credentials and scope of clinical practice defined in anaesthetics available to assist with caesarean sections and complex operative deliveries.
- A paediatrician or a medical practitioner with credentials and scope of clinical practice defined in neonatal care to provide support if required.
- A diagnostic imaging and pathology service available for support.
- A specialist obstetrician, specialist paediatrician and anaesthetist available for support as required.
- On-call arrangements for all medical practitioners to provide 24-hour cover within a time consistent with the health service's risk management protocol.

Level 4: All births including caesareans and complex cases. Neonatal support in a level 2 special care nursery.

Hospitals offering this level of birthing service must have as a minimum:

- One or more specialist obstetricians, as defined by RANZCOG, or medical practitioners available with credentials and scope of practice defined in advanced obstetrics to provide secondary level care for complex patients.
- One or more qualified anaesthetists or medical practitioners available with appropriate credentials and scope of clinical practice defined in anaesthetics available to assist with caesarean sections and complex operative deliveries.
- One or more specialist paediatricians with appropriate credentials and scope of clinical practice defined to support the level 2 special care nursery.
- A designated paediatrician with responsibility to ensure the neonatal service functions appropriately.
- A resident medical officer available to support the level 2 special care nursery.
- A diagnostic imaging service available, with medical staff with credentials and scope of clinical practice defined in radiology.
- A pathology service available, with medical staff with credentials and scope of clinical practice defined in pathology.
- On-call arrangements for all medical practitioners to provide 24-hour cover, within a time consistent with the health service's risk management protocol.

Midwifery nursing staff

Level 1: Antenatal and postnatal only

Hospitals offering this level of birthing service must have as a minimum:

- Midwives with current certificate of practice and with skills to provide antenatal and postnatal care.
- Staff with lactation skills and access to a lactation consultant for specialist advice.
- Midwives to provide parental support and education.

Level 2: Low-risk normal births only

Hospitals offering this level of birthing service must have as a minimum:

- Midwives with current certificate of practice available either on each shift when a woman is admitted in labour or requires postnatal care OR under a team or known midwife model.
- Nurses/midwives with experience in neonatal or paediatric care and/or undertaking relevant studies.
- Staff with lactation skills and access to a lactation consultant for specialist advice.
- Midwives to provide parental support and education.
- When a midwife is not on hospital duty, there must be 24 hour on-call arrangements in place for the unexpected presentation of an obstetric patient.

Level 3: All births including caesareans

Hospitals offering this level of birthing service must have as a minimum:

- Midwives with current certificate of practice available either on each shift when a woman is admitted in labour or requires postnatal care OR under a team or known midwife model.
- Hospitals with a defined obstetric service or ward area should have a Division 1 nurse with midwifery qualifications and current certificate of practice on every shift.
- Nurses/midwives with experience in neonatal or paediatric care and/or undertaking relevant studies.
- Staff with lactation skills and access to a lactation consultant for specialist advice.
- Midwives to provide parental support and education.

Level 4: All births including caesareans and complex cases. Neonatal support in a level 2 special care nursery.

Hospitals offering this level of birthing service must have as a minimum:

- Regional hospitals with a dedicated obstetric service or ward area should have a Division 1 nurse with midwifery qualifications and current certificate of practice on every shift.
- The nurse unit manager should have a minimum of three years' midwifery experience.
- The staff mix should include another midwife with at least two years' experience.
- Nurses/midwives allocated to the neonatal area should have experience in neonatal or paediatric care and/or be undertaking relevant studies.
- A lactation consultant must be available for specialist advice.
- Midwives to provide parental support and education.

Allied health and clinical support staff

Hospitals must have (as a minimum) regular access to allied health staff, including a physiotherapist, social worker and dietician. This could include access to one or more sessions on a weekly basis, with appointments available when required. For larger regional services, allied health staff must be on site.

Level 1: Antenatal and postnatal only

Hospitals offering this level of birthing service must have as a minimum:

- Access or referral to allied health staff including a physiotherapist, social worker and dietician (minimum of one session a week, with appointments available when required).

Level 2: Low-risk normal births only

Hospitals offering this level of birthing service must have as a minimum:

- Access or referral to allied health staff including a physiotherapist, social worker and dietician (minimum of one session a week, with appointments available when required).

Level 3: All births including caesareans

Hospitals offering this level of birthing service must have as a minimum:

- Access to allied health staff including a physiotherapist, social worker and dietician, with appointments available when required.
- These services should be regular visiting services, if not on site.
- Access to a radiology technician, to perform x-rays as required.

Level 4: All births including caesareans and complex cases. Neonatal support in a level 2 special care nursery.

Hospitals offering this level of birthing service must have as a minimum:

- Access to allied health staff including a physiotherapist, social worker and dietician, with appointments available when required.
- These services should be on site.
- Access to a radiology technician, to perform x-rays as required.

Training and maintenance of skills

All health care professionals are responsible for the care they provide and thus for the maintenance of their competencies. Maintaining professional skills is a challenge in rural areas, particularly those with low birth numbers, so it is important that clinical staff are supported as much as possible and have opportunities for development.

Midwives in Victoria are guided in their sphere of practice and responsibilities by the *Code of Practice for Midwives in Victoria*.[10] It is essential that midwives are aware of their responsibility to adhere to this code of practice. The annual registration renewal documentation is signed confirmation of this fact.

All doctors holding a diploma or degree with the Royal Australian College of Obstetricians & Gynaecologists (RANZCOG) must undertake continuing professional development (CPD) in this discipline and fulfil requirements triennially. All GPs holding vocational registration must fulfil mandatory requirements for general CPD, through either the Australian College of Rural & Remote Medicine (ACRRM) and/or the Royal Australian College of General Practitioners (RACGP).

All rural health services must provide educational support for health professionals involved with pregnant and birthing woman, in at least the following areas:

- antenatal and postnatal care
- normal progress of labour, including CTG interpretation and appropriate recording
- identification and management of emergency situations, including neonatal resuscitation
- basic/advanced life support.

It is incumbent upon health service boards of management and management to ensure that educational programs are available. In some rural health services, this may include non-midwifery endorsed nurses attending training, to enable them to provide assistance where only one midwife is rostered per shift.

Development and maintenance of a competent and skilled workforce (both medical practitioners and midwives) is essential to ensure optimal patient outcomes. A decision to continue provision of birthing services in rural areas, where the criteria for a quality and safe service can be met, should result in a flow-on effect for workforce retention. This decision should give encouragement to both rural doctors and midwives to confidently enter rural practice, in the knowledge that their skills will be valued and utilised.

3. Clinical guidelines

Each health service will be responsible for the development of clinical guidelines for its own birthing service. While generic and consistent guidelines across regional and sub-regional areas will be encouraged, local references based on local circumstances and ownership are essential to ensure compliance. It is also essential that guidelines be based on best available levels of evidence and be regularly monitored and updated to ensure the evidence base remains current.

The guidelines will need to consider:

- the level of birthing service provided
- the models of care and complexity of service available at the health service
- risk management, with consideration of acceptable risk at stages along the continuum, from low-risk to high-risk
- the role of the health service within the total service system for the area. Includes consideration of alternative services and the travel distance and time required to access
- education and support for women and families during the antenatal and postnatal periods.

To ensure compliance and local relevance, a range of stakeholders should be involved in the development of clinical guidelines. This includes the medical staff with credentials and defined scope of practice in obstetrics, all midwives and hospital management. Rural Ambulance Victoria and the local ambulance service is also an important stakeholder in the decision making process and should be involved in coordination between services and agencies. Involvement of other external stakeholders such as General Practice Divisions Victoria (GPDV) should be considered at the local level.

When defining protocols for a birthing service, four critical periods need to be considered and risks assessed and managed accordingly:

1. **Early antenatal period:** The requirement for early assessment of risk and identification of a potentially complex pregnancy. Referral to an alternative service should be organised if the level of complexity appears higher than appropriate for the level of service offered. The nature of the service preferred by the pregnant woman should also be determined at this time, including options for shared care and midwifery team models where these are available.
2. **Management of pregnancy:** This phase includes ongoing assessment of both maternal and fetal complexity and risk. Must also include the ability to deal with signs of fetal distress and organise later referral as appropriate.
3. **Management of labour and birth:** The ability to deal with signs of fetal distress is critical during this phase. Procedures and protocols for late referrals due to complications during labour are required, as are protocols for an emergency birth where transfer in second stage is not possible. Access to the Perinatal Emergency Referral Service (PERS) will provide support before, during and following transfer.

4. **Postnatal period**: Provision of blood and blood products may be required. Related services include neonatal facilities, equipment and transfer arrangements with Newborn Emergency Transport Service (NETS); maternal and child health services.

In developing clinical guidelines and a risk assessment protocol, health services should consult existing guidelines and documents. These include but are not limited to:

- Three Centres Consensus Antenatal Guidelines[11]
- National Midwifery Guidelines for Consultation and Referral. The Australian College of Midwives Incorporated (ACMI). January 2004[12]
- RANZCOG Statements of clinical practice[13]
- Annual Reports of the Consultative Council on Obstetric and Paediatric Mortality and Morbidity, which provide clinical guidelines for identification of high-risk obstetrics.

In addition to clinical factors, there are specific issues to be considered in development of guidelines for each level of care. These include:

Level 1: Antenatal and postnatal only.

- Referral protocols for birth at an alternative service, with potential transfer back to the level 1 health service during the early postnatal period.
- An emergency transfer system, to manage those potential times when a woman does present to the hospital either in late pregnancy or in labour.
- Transfer of patient information, within privacy guidelines.
- Protocols in place for an emergency birth, if timely transfer in second stage is not possible for women who present at the hospital with a birth imminent.
- The development of networks and supportive relationships between larger and smaller regional centres, to assist the continuation of local birthing services, where arrangements can be put in place for outreach support and education.

Level 2: Low-risk normal births only.

- The level of care provided within the definition of a normal birth should be clearly articulated. For example, this can include assistance with low forceps or episiotomy.
- A well coordinated process for transfer to alternative level 3 or 4 services, including referral pathways.
- The management of emergency situations, with the potential for an emergency procedure. This will include processes to support an emergency caesarean section, where this needs to be performed in accordance with clinical evidence of urgency and risk management protocols.
- The process and delineation of responsibility for patient management when there will be unusual delay in transfer.

- Transfer of patient information, within privacy guidelines.
- Where instances arise such as staff taking leave, the range of services offered may need to change. It is essential that this is understood by all staff and also by the community affected by variable arrangements.

Level 3: All births including caesareans.

- A well coordinated process for transfer to a level 4 service if required, including referral pathways.
- Protocols for transfer from and postnatal transfer to level 1 and 2 services.
- Transfer of patient information, within privacy guidelines.
- Policies and procedures for services that may be intermittent. There may be circumstances where available services change when exceptional circumstances arise. An example would be the temporary suspension of complex operative births, if medical staff were not available for a period of time.

Level 4: All births including caesareans and complex cases. Neonatal support in a level 2 special care nursery.

- Protocols for transfer from and postnatal transfer to other birthing services at levels 1, 2 or 3.
- Transfer of patient information, within privacy guidelines.
- Provision of support, assistance and expertise to services at levels 1, 2 or 3 within the regional or sub-regional area.

4. Quality standards

As has been described, the clinical guidelines and protocols put in place must be applicable to each particular hospital. The guidelines should be based on well researched and frequently reviewed evidence-based guidelines.

Appropriate management–identified in policy and procedure documents–must be achievable by the organisation and factor in the average numbers and skill mix of the staff usually available.

The service level determined for each health service will be appropriate to the situation at the time, but as circumstances change, this will need regular review. Changing circumstances will particularly relate to changes in clinical staff numbers and currency of experience. A system should be implemented to ensure that all staff, including new or agency staff, have knowledge of and are familiar with all policies and procedures. This system will also require regular evaluation.

Clinical risk assessment

As pregnancies classified as low-risk can have the potential to become high-risk during the course of the pregnancy, labour and birth, it is imperative that a continuous process of risk assessment becomes part of the routine practice.

The management of a rural birthing service must recognise and understand service provision boundaries in terms of staff availability, skill mix and knowledge, equipment, geography, emergency transport and response times. This is particularly relevant to services classified as Level 1 or Level 2. Recognition of the boundaries will mean appropriate management of difficult clinical situations, making it easier for health professionals to identify in a timely manner those women requiring transfer to an alternative service.

Clinical governance

Executive management, together with the board and employed health professionals, need to be able to demonstrate to the relevant stakeholders that the service can:

- manage a birthing service to the level determined
- recognise and appropriately act upon unexpected emergency situations
- provide timely intervention at all times if required
- review and monitor performance data and outcomes of care
- review benchmarking performance data and participate in review of procedures, protocols, training, upskilling and care provided to address any issues arising
- report to the community about review, monitoring and quality improvement activities undertaken.

Effective clinical governance processes will also enable rural birthing services to recognise the importance of collaboration between all health professionals.

Credentialing and defining scope of practice

A minimum requirement of adequate clinical governance is to have a formal credentialing and clinical privileging system in place, within each health service.

Credentialing refers to the formal process of assessment of an individual practitioner's qualifications, skills, experience and suitability to provide a safe, high quality service. This information is then used to determine the clinical privileges or scope of practice to be defined for that individual within the health service. This determination must also include consideration of the needs and capability of the organisation to support the practitioner's scope of clinical practice. They represent the range and scope of clinical responsibility that a practitioner may exercise in the facility.

The Australian Council for Safety and Quality in Health Care has recently developed a National Standard for Credentialing and Defining the Scope of Clinical Practice of medical staff.[14] This will be used as the basis for a standard process of credentialing and defining scope of practice to be implemented in rural Victoria, to ensure consistency across rural health providers of acceptable levels of practice and models of care. The department's Rural and Regional Health and Aged Care Services Division is working with rural and regional directors of medical services to develop this implementation plan.

Informed consent

The birthing service should be able to offer a pregnant woman some choice in the way in which her pregnancy and birth are managed clinically. This will include primary care shared care arrangements where possible. The *Rural Maternity Initiative* and *Future Directions* document should assist this development.

For a level 2 service, it is important that potential problems are identified and discussed with each woman (and where appropriate, with her partner or family) prior to the onset of labour. Women must have the opportunity to be fully informed of the services that are available and those that are not in this level of service, such as epidural anaesthesia and caesarean section. Discussion should also include full explanation of the risk surrounding an urgent transfer in the event of complications arising.

Each level of service provision offers certain benefits and risks and the woman and her family are encouraged to make an informed decision about the type of care she chooses. Reporting of birth outcomes and clinical indicators by each hospital will inform both consumers and staff.

If a woman then chooses to birth in a level 2 service, she must acknowledge the limitations and possible risks associated with that choice. These communications and discussions should be fully documented during the pregnancy, preferably before 34 weeks, and this documentation will then assist the formal process of informed consent.

5. Support services

The level of support services required will vary according to the service level provided.

Level 1: Antenatal and postnatal only

Hospitals offering this level of birthing service must have as a minimum:

Infrastructure

- facility should conform to the minimum standards required by the *Design Guidelines for Hospitals and Day Procedure Centres*[15]
- space to support consultations between doctors, midwives and women–includes both single consultations and group education sessions
- equipment to support an emergency birth
- neonatal resuscitation equipment, with staff trained and competent in its use
- referral protocols for antenatal ultrasound
- referral protocols for antenatal fetal monitoring or cardiotocograph machine (CTG).

Neonatal level of care

A neonatal service is not applicable, but for postnatal care of newborn infants the standards within Level 1 should be applied.

Pathology service

- capacity for blood and specimen collection mechanisms.

Pharmacy service

- An on-site pharmacy service is not required, but there must be at least a supply of emergency drugs through an imprest system and the capacity to consult with a clinical pharmacist.
- The hospital must comply with relevant statutory regulations regarding the provision of medications and must provide appropriate levels of information about the drugs prescribed.
- Administration of medications by medical, midwifery and nursing staff must comply with Australian Pharmaceutical Advisory Council (APAC) guidelines , with input from a visiting or consulting pharmacist.

Level 2: Low-risk normal births only

Hospitals offering this level of birthing service must have as a minimum:

Infrastructure

- facility should conform to the minimum standards required by the *Design Guidelines for Hospitals and Day Procedure Centres*
- a large room or birthing suite, with equipment required to support a normal birth
- 24-hour access to fetal monitoring or cardiotocograph machine (CTG)
- capacity and expertise to perform x-rays
- access to ultrasound services (may be through referral to regional or sub-regional service)
- space to support consultations between doctors, midwives and women–includes both single consultations and group education sessions.

Neonatal level of care

Service to meet Level 1 neonatal care, as defined by the *Neonatal Services Guidelines*.[17]

Pathology service

- capacity for blood and specimen collection mechanisms
- ability to administer blood products (may include cross-matched blood managed by an off-site laboratory and available within one hour)
- where blood and blood products are to be transported and stored, the minimum standards must comply with the recommendations specified by the Australian Red Cross Blood Service (ARCBS)
- services (whether on or off site), must be provided by a pathology facility which meets the Royal College of Pathologists of Australasia and the National Association of Testing Authorities (RCPA/NATA)[19] accreditation standards.

Pharmacy service

- pharmacist employed on a part-time or sessional basis, or available for consultation
- coordination of drugs distribution from community pharmacy, with at least a supply of emergency drugs through an imprest system
- hospital must comply with relevant statutory regulations regarding the provision of medications and must provide appropriate levels of information about the drugs prescribed
- administration of medications by medical and nursing staff must comply with APAC guidelines, with input from a visiting or consulting pharmacist.

Level 3: All births including caesareans

Hospitals offering this level of birthing service must have as a minimum:

Infrastructure

- facility should conform to the minimum standards required by the Design Guidelines for Hospitals and Day Procedure Centres
- one or more fully equipped birthing rooms or suites
- a fully equipped operating theatre and recovery area for caesarean sections
- designated postnatal beds, with number depending on the service volume and models available
- 24-hour access to fetal monitoring or cardiotocograph machine (CTG)
- radiology and ultrasound facilities, with staff trained and skilled in its use
- space to support consultations between doctors, midwives and women–includes both single consultations and group education sessions.

Neonatal level of care

Service to meet at least the requirements of Level 1 neonatal care, as defined by the Neonatal Services Guidelines.

Pathology service

- capacity for blood and specimen collection mechanisms
- ability to administer blood products, including cross-matched blood available on site, and on call 24 hours
- where blood and blood products are to be transported and stored, the minimum standards must comply with the recommendations specified by the Australian Red Cross Blood Service (ARCBS)
- services (on or off site) must be provided by a pathology facility which meets the Royal College of Pathologists of Australasia and the National Association of Testing Authorities (RCPA/NATA) accreditation standards.

Pharmacy service

- pharmacist employed on a part-time or sessional basis
- coordination of drugs distribution from community pharmacy, with at least a supply of emergency drugs through an imprest system
- hospital must comply with relevant statutory regulations regarding the provision of medications and must provide appropriate levels of information about the drugs prescribed
- administration of medications by medical and nursing staff must comply with APAC guidelines, with input from a visiting or consulting pharmacist.

Level 4: All births including caesareans and complex cases. Neonatal support in a level 2 special care nursery

Hospitals offering this level of birthing service must have as a minimum:

Infrastructure

- facility should conform to the minimum standards required by the Design Guidelines for Hospitals and Day Procedure Centres
- two or more fully equipped birthing suites
- one or more fully equipped operating theatres and recovery area for caesarean sections
- designated postnatal beds, with number depending on the service volume and models available
- 24-hour access to fetal monitoring or cardiotocograph machine (CTG)
- radiology and ultrasound facilities, used by trained and skilled staff
- space to support consultations between doctors, midwives and women–includes both single consultations and group education sessions.

Neonatal level of care

Requires a fully equipped special care nursery, to meet at least the requirements of Level 2 Low Care, as defined by the Neonatal Services Guidelines. Level 2 High Care will be required in major regional centres.

Pathology service

- capacity for blood and specimen collection mechanisms
- ability to administer blood products, including cross-matched blood available on site, and on call 24 hours
- where blood and blood products are to be transported and stored, the minimum standards must comply with the recommendations specified by the Australian Red Cross Blood Service (ARCBS).
- services must be provided by an on-site pathology facility that meets the Royal College of Pathologists of Australasia and the National Association of Testing authorities (RCPA/NATA) accreditation standards
- regional services must also have a laboratory that meets the standards of the National Pathology Accreditation Advisory Committee (NPAAC).[20]

Pharmacy service

- on-site pharmacy service, managed by clinical pharmacist or contracted service with clinical pharmacy service provision on weekdays (access to a pharmacist for emergency advice should be available 24 hours)
- the hospital must comply with relevant statutory regulations regarding the provision of medications and must provide appropriate levels of information about the drugs prescribed
- administration of medications by medical and nursing staff must comply with APAC guidelines.

Implementation

The planning framework is provided as a guide to decision making for health services. Application of the framework ensures a standard and consistent approach to planning, with decisions about future service provision made with a clear reference to acceptable standards.

Implementation will examine how access to all appropriate levels of service can be made available to communities. Planning will be required across both sub-regional and regional areas to determine a comprehensive mix, with varying levels of birthing service provided to meet community need. The department expects that agencies will work together to develop a coordinated system of care, with the role of each agreed and defined, rather than simply focus on each health service, individually.

Where a hospital currently provides a birthing service, the service should be assessed against the criteria to evaluate compliance and to determine the most appropriate service level. If a criterion is not met, this should be identified and discussed with the department's regional office in the first instance, to determine a way forward.

A number of rural health services do not currently offer birthing services. Implementation of the planning framework will encourage those services to provide at least Level 1 services if possible.

There are particular rural areas where further review and coordinated service planning will be required. These will be services in areas where either the numbers of births are falling significantly over an extended period, or where advanced obstetric care is either unavailable or tenuous, typically because of skills shortages. This will be the subject of further work between the department and health services.

Funding to support the service mix can be made available from a number of sources. Small rural health services have funding flexibility within their existing budgets, where these services are funded through the Small Rural Health Services Funding and Accountability Approach (SRHS) . Currently the SRHS approach encompasses 66 small rural health services that deliver a range of health services and are located in communities with a population of less than 5,000. Funding to support development of primary care models may also be available from the *Rural Maternity Initiative*. Again, contact should be made with the department's regional office in the first instance to pursue these and other options.

It is important that the criteria developed are relevant to the rural hospitals undertaking birthing services. The criteria must also remain current and incorporate changing clinical practice where this is applicable. The guidelines will be reviewed and updated by 2010.

Appendix 1: Planning framework–summary

Health Service Level	Level 1	Level 2	
	Antenatal and postnatal support, without births	Low risk normal births only	
Maternity Service Level	Primary Care	Primary Care	
Criterion 1: **Catchment Area**	• service sustainable in local area • access to alternative services	• service sustainable in local area • access to alternative services	
Criterion 2: **Clinical Staff**	Medical • GP credentialed for obstetric care Midwifery • skilled midwives Allied health • access/referral to at least physiotherapist, social worker and dietician	Medical • GP credentialed for obstetric care • specialist obstetrician and paediatrician for consultation Midwifery • skilled midwives • 24 hour on-call • nurses/midwives with neonatal/ paediatric skills Allied health • access/referral to at least physiotherapist, social worker and dietician	
Criterion 3: **Defined Clinical Guidelines**	• guidelines appropriate to service and level of risk • referral guidelines for birth in alternative setting • guidelines to support emergency/ unplanned birth	• guidelines appropriate to service and level of risk • referral guidelines for transfer to Level 3 or Level 4 service • guidelines to support emergency procedures, including caesarean • guidelines for intermittent service delivery	
Criterion 4: **Quality Standards**	• all defined quality standards maintained • a process for credentialing and defining scope of clinical practice is in place • informed consent	• all defined quality standards maintained • a process for credentialing and defining scope of clinical practice is in place • informed consent	
Criterion 5: **Support Services**	Infrastructure • facility complies with *Design Guidelines* • consultation space • referral to ultrasound and fetal monitoring • equipment to support emergency birth • neonatal resuscitation equipment Pathology • blood and specimen collection service Pharmacy • drugs through imprest system • pharmacist for consultation	Infrastructure • facility complies with *Design Guidelines* • room/space for birthing • equipment to support birth • 24-hour access to fetal monitoring • ability to x-ray • access or referral to ultrasound • consultation space Pathology • blood and specimen collection service • ability to administer blood products within 1 hour Pharmacy • pharmacist employed • drugs through imprest system	
Neonatal Service Level	Not Applicable	Level 1	

	Level 3	Level 4
	All births including caesareans	All births including caesareans and complex cases. Level 2 special care nursery
	Primary Care and/or Secondary Care	Primary Care and/or Secondary Care
	• service responsive to needs of catchment area • relationship with other service providers in sub-regional area	• service responsive to needs of catchment area • relationship with other service providers in regional or sub-regional area
	Medical • medical practitioners (GP/Ostet) credentialed for advanced obstetrics • anaesthetist or equivalent. • paediatrician or equivalent. • 24 hour on-call • specialist obstetrician and paediatrician for consultation Midwifery • experienced midwives • Div 1 on each shift • nurses/midwives with neonatal/paediatric skills Allied health • access to at least physiotherapist, social worker and dietician	Medical • specialist obstetrician • anaesthetist • paediatrician • RMO for SCN • 24 hour on-call Midwifery • Div 1 on each shift • NUM with 3 years experience • experienced midwives • nurses/midwives with neonatal/paediatric skills and experience Allied health • on-site access to at least physiotherapist, social worker and dietician
	• guidelines appropriate to service and level of risk • referral guidelines for transfer to Level 4 service • guidelines for transfer from and postnatal transfer to Level 1 and 2 services • guidelines for intermittent service delivery	• guidelines appropriate to service and level of risk • guidelines for transfer from and postnatal transfer to services at other levels • provision of support and expertise to other services within the sub-regional or regional area
	• all defined quality standards maintained • a process for credentialing and defining scope of clinical practice is in place • informed consent	• all defined quality standards maintained • a process for credentialing and defining scope of clinical practice is in place • informed consent
	Infrastructure • facility complies with *Design Guidelines* • fully equipped birthing suites • fully equipped operating theatre • designated postnatal beds • 24-hour access to fetal monitoring • radiology and ultrasound available • consultation space Pathology • blood and specimen collection service • ability to administer blood products on site Pharmacy • pharmacist employed • drugs through imprest system	Infrastructure • facility complies with *Design Guidelines* • fully equipped birthing suites • fully equipped operating theatre • designated postnatal beds • 24-hour access to fetal monitoring • radiology and ultrasound available • consultation space Pathology • blood and specimen collection service • ability to administer blood products on-site • on-site pathology facility Pharmacy • on-site pharmacy service • 24 hour access required
	Level 1	Level 2 – Low Care OR Level 2 – High Care

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Notes

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