Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning

HPU 510 – Maternity Unit

Revision 7.0
18 May 2017

Index

01 INTRODUCTION

1.1 PREAMBLE

This Health Planning Unit (HPU) has been developed for use by the design team, project managers and end users to facilitate the process of planning and design.

The Maternity Unit HPU was originally developed for NSW Health and issued for Australasian use in 2006. This revision has been informed by an extensive consultation process during 2016 and has included clinical experts and consumers.

1.2 INTRODUCTION

This HPU outlines the requirements for the planning and design of maternity services and broadly encompasses antenatal, interpartum and postpartum care in inpatient and outpatient settings.

This document should be read in conjunction with the Australasian Health Facility Guidelines (AusHFG) generic requirements described in:

- Part A: Introduction and Instructions for Use;
- Part B: Section 80 - General Requirements and Section 90 - Standard Components;
- Part C: Design for Access, Mobility, OHS and Security;
- Part D: Infection Prevention and Control; and
- Part E: Building Services and Environmental Design.

Selected services and facilities may be established at centres where highly complex services are delivered but are excluded from this document. These services include:

- reproductive / infertility units;
- milk banks; and
- clinical genetics units.

The following related AusHFG resources should also be referenced where appropriate:

- HPU390 Intensive Care Unit – Neonatal / Special Care Nursery;
- HPU155 Ambulatory Care Unit; and
- HPU520 Operating Unit.

1.3 POLICY FRAMEWORK

Before undertaking a project, planners and project staff are encouraged to familiarise themselves with jurisdictional plans, policies and guidelines relating to maternity services. Key maternity services policies include:

- National Maternity Services Plan, February 2011, Commonwealth of Australia; and
- National Maternity Services Capability Framework 2012, Commonwealth of Australia.

Information relating to jurisdictional policies and guidelines are listed in the Appendices in the Further Reading and References sections.

1.4 DESCRIPTION

1.4.1 Description of Maternity Health Planning Unit (HPU)

Maternity care refers to antenatal, labour and birth care and postnatal care for women and their babies up to six weeks after birth. Strong relationships and linkages between maternity, neonatal and other specialist services are vital to quality maternity care.

The National Maternity Services Plan is underpinned by principles that have been used to inform the development of this document.

The National Maternity Services Capability Framework describes information needed to support the planning of maternity services. Service levels will affect the range of maternity services and the clinical support services profile.

A maternity unit may include antenatal outpatient services, a birth unit and inpatient beds to support antenatal and postnatal care. Depending on the role of service, extended services may be provided including newborn care / neonatal intensive care services and access to an operating suite for caesarean births. Typical service components may include:

- **Antenatal care** is a routine part of pregnancy care which aims to support and monitor the woman and detect complications early so they can be actively managed. The range of services being provided in outpatient settings is increasing with less reliance on inpatient care. In future, some monitoring may be provided using remote technology and telehealth. While much of this care is provided in hospital settings, midwifery led clinics may also be conducted in community based settings. Examples of antenatal care include:
    - visits to midwives, GP, obstetricians and other specialist services;
    - day stay monitoring of mother and/or fetus including CTG (cardiotocography), ultrasound, pathology, blood pressure;
    - multidisciplinary screening, assessment and treatment, e.g. mental health and domestic violence screening;
    - exercise, relaxation and parent education classes - in hospital or community settings; and
    - inpatient care for a range of conditions such as pre-eclampsia.
- **Birth units** provide a number of birth rooms which will be used in a flexible way to accommodate different service models and approaches with some used for the labour, birth and recovery (LDR) phases with transfer to a postnatal bed after one to two hours after the birth. The room may also be used for the labour, birth and recovery phases, with the mother occupying the room for between four to six hours after the birth before being discharged home (LDRP).

  Planned and unplanned caesarean sections will occur in an operating theatre. The mother will need to be recovered and ideally not separated from her child so that skin to skin contact is maintained.

  A birth centre service will manage midwifery led low risk births.
- **Postnatal care** may include:
    - general recovery in an inpatient unit of mother and baby;
    - mothercraft, lactation and parent education;
    - visit to outpatient clinics; and
    - community / home-based follow-up for extended periods in some cases.

Models outlined in this document support ‘rooming-in’ and a nursery has not been included. Inpatient bed rooms may need to support some low level treatment such as phototherapy.

1.4.2 Terminology

Maternity

Encompasses the period of a woman's pregnancy, labour and birth and postnatal period up to six weeks after the birth. Includes the disciplines of obstetrics and midwifery and the term is used to represent both.

Birth Room

A room designed to support any woman through labour, birth and the early postnatal period. For the purposes of this document, it is assumed that requirements do not change and a delivery room and birth room are one and the same and will be adapted to support a range of care needs.

Birth Centre

Refers to a separate section of a hospital or a separate location on a health care site where midwives provide low risk women with antenatal, intrapartum and a short period of postpartum care for mother and baby.

Facilitated Group Antenatal Care

This model provides facilitated group antenatal care for between eight to 12 women and often their partners. These women have the same number of scheduled antenatal appointments times and the model allows women to share and learn from each other. Access to alternate rooms, such as large education type spaces will be needed.

02 PLANNING

2.1 OPERATIONAL MODELS

2.1.1 Woman Centred Care

The National Maternity Services Plan has as one of its key principles the idea that maternity care should place the 'woman at the centre of her own care' and this care is coordinated according to her needs 'including her cultural, emotional, psychological and clinical needs, close to where she lives' (p. 26). A key consideration is the place or environment where women give birth (home, hospital birth unit or birth centre).

2.1.2 Models of Maternity Care

A range of models of care, with continuity of care underpinning each approach, may be used by maternity services. Major model categories are described in the Maternity Care Classification System (November 2014) published by the Australian Institute of Health and Welfare. Refer to the Appendix AX06 for a summary of these models.

2.1.3 Assessment / Early Pregnancy Unit

This model may be used by some jurisdictions to manage the pregnant woman with threatened miscarriage. A dedicated unit / clinic may be collocated with other maternity services or be provided in a location adjacent to an emergency department. This dedicated facility would usually be provided at a tertiary centre.

Other approaches may include providing a dedicated room in an emergency department or the use of a bed room in a maternity inpatient unit

2.1.4 Operating Theatres

Those services capable of providing caesarean sections will usually use an operating theatre and Stage 1 recovery in the main hospital theatre suite. While many procedures are planned, birth unit must be located to facilitate rapid access in emergencies and unplanned procedures. Operating theatres are also accessed for other procedures such as manual removal of a placenta.

Selected services may provide a dedicated obstetrics theatre, collocated alongside the birth unit. This model is less common and may be implemented if the distance to the main operating theatre suite is too far.

2.1.5 Outpatient / Day Stay Services

The size and scale of the maternity service may influence planning associated with outpatient / day stay services. Considerations may include:

- the location of antenatal clinics. Services may provide routine antenatal visits in a community based setting;
- throughput as small services may need access to bookable rooms rather than dedicated space;
- a requirement to develop a single location for all maternity related services so that all service components are collocated. This may also include gynaecology outpatient services. The arrangement will be dependent on local requirements; and
- a requirement for specialist services, usually provided to a catchment, such as maternal fetal medicine services.

Ultrasound services will routinely be provided by the hospital medical imaging unit or by private services located in the community. Where a maternal fetal medicine service is provided, ultrasound

services may be provided, but will only routinely provide these services to high risk mothers and those being assessed by an assessment / early pregnancy service.

2.1.6 Birth Units

Services will need to assess approaches to birth suites. Each birth suite will typically have access to a birth room with attached ensuite. A service will then need to decide if the rooms will contain a bath in each birth room or a percentage of rooms. Many services offering various models will opt for a generic suite that can be adapted as required to suit the situation and staff providing care.

A bath, where provided, must be deep and wide enough for effective water immersion during labour and birth (where supported). In this document, these baths will be referred to as birthing pools. The use of birthing pools should be based on local policies and protocols for water immersion during labour and birth.

2.1.7 Birth Centres

Centres may be provided alongside other hospital services or in a freestanding location. Typical arrangements may provide a birth centre:

- collocated with a birth unit as part of a broader maternity service; or
- as a discrete unit within a hospital building; or
- as a discrete unit on a hospital site.

The service is based on women screened as low risk and protocols need to be established to transfer either the mother or baby in the event of an emergency or need for a more complex level of care.

The centre, where a discrete service is provided, will be self-contained and operate as a 'one-stop-shop' for care. Women will begin to visit for antenatal care, then for the birth and may revisit for some postnatal follow up. Most postnatal follow up will be undertaken at home.

A birthing pool will routinely be provided for water immersion.

2.1.8 Homebirths

Where a maternity service provides a homebirth program, staff will be based with the hospital service and require access to office, car parking and equipment storage space.

2.1.9 Management of Special Needs

Selected services may need to consider the particular needs of women. For example, a hospital providing an acute spinal service may provide an accessible bed room and ensuite to support the care of these women.

The management of mothers who are obese is often considered high risk and care should be provided according to local capability / role delineation frameworks. The requirements for bariatric type facilities while considered, may not present the same issues as in an inpatient environment as mothers may be physically dependent but rarely immobile.

2.1.10 Bathing Newborns

Three broad models are used to provide bathing options for newborns:

- a fixed baby bath is included in the inpatient bed room suite, although this can restrict space;
- a mobile bath is used; or
- a room, used for bathing demonstrations and general use by parents, is provided. With the increase use of single bed rooms, this shared space provides an opportunity for new

mothers to engage with others. The number of baths needed will depend on the size of the unit but assumes staggered use.

2.2 OPERATIONAL POLICIES

The following issues should be considered in the development of the operational model for the Unit, as they will all impact the configuration of the Unit and overall space requirements.

Operational policies should be developed as part of the project planning process. Refer to Part B Section 80 General Requirements for further information.

2.2.1 Hours of Operation

Maternity services provide 24/7 services. Birth centres may not routinely operate out of hours. When a woman is in labour, she will contact midwifery staff and be met at the Birth Centre.

2.2.2 Management of Breast Milk

Expressed breast milk will be stored in a suitable refrigerator / freezer located in a staff-only accessible area. Each baby should have their labelled bottles stored in an allocated area within the fridge so that the right baby receives the right milk. For further information relating to this issue refer to:

- NSW Health PD2010_019 Maternity – Breast Milk: Safe Management (2010); and
- jurisdictional policies.

'Milk banks' have not been included in the scope of this document however, jurisdictions may have local policies relating to milk bank services.

2.2.3 Pain Management

Various methods of support / pain management may be used within the birth room including but not limited to:

- support and encouragement from chosen birth companion(s) and/or professional care providers (who need to be accommodated comfortably within the room);
- active movement including; walking, sitting, standing, kneeling, squatting, side-lying, lying prone and leaning forward;
- water immersion in a shower or birthing pool;
- acupressure, acupuncture, massage, aromatherapy;
- listening to music (personal choice);
- viewing nature;
- medications including nitrous oxide / oxygen;
- epidurals;
- warm perineal packs (used during second stage of labour to prevent perineal tearing); and
- access to food and fluids and ice chips.

2.2.4 Newborn Screening

A range of screening will be conducted on newborns including screening for rare diseases and hearing. These activities will usually be conducted at the bedside. Local access to storage for the newborn hearing screening equipment may be required.

2.2.5 Management of Perinatal Loss

Within the birth unit, a multipurpose room will be used to accommodate a range of functions including counselling and follow-up care associated with perinatal loss. A family may come and go for several days where a baby is stillborn. 'Cold cots' or chilling mats are required to properly accommodate the baby.

Should the mother require an inpatient stay, this may be best provided with gynaecology or antenatal beds. This may not always possible and a room is provided in a discrete location within a postnatal unit. A partner will usually stay so will need access to a bed. Double beds may be an option.

2.2.6 Education

Both antenatal and postnatal education programs will be provided by maternity services. Antenatal classes may be provided from a range of sites, including community settings. Postnatal education is usually provided in the postnatal inpatient unit where a large community space is used.

2.3 PLANNING MODELS

2.3.1 Location

Twenty four hour access is required to a birth unit. The location, signage and wayfinding strategy should ensure that families can find the services quickly and easily.

Birth services should ideally be located to provide a quiet environment with outlook and outdoor access during labour for both mother and partner. Access to dedicated and secure outdoor areas is of particular importance for units providing services to large numbers of Aboriginal women.

Planning should consider the proximity of 24 hour and eight hour operational zones. While reception points may be available during business hours, these will not routinely be occupied out of hours so signage and wayfinding should function across the continuum.

Locate units so that staff are not working in isolation nor have to traverse unoccupied areas at night. The positioning of units should optimise the capacity for staff to observe and assist each other.

2.4 FUNCTIONAL AREAS

2.4.1 Functional Zones

Functional zones may include:

- entry, reception and waiting;
- outpatient / day only services;
- birth unit;
- inpatient unit;
- clinical support; and
- staff areas including office and support space and amenities.

2.4.2 Entry / Reception / Waiting

Size and design will depend on the size of the service. The area may also include retail facilities such as a coffee lounge and a baby boutique, although these facilities might best be located in the main entry of the facility. A reception area, where provided, will be positioned to observe entry to the Unit and waiting space. This reception area may also provide clerical admission services so this needs to be understood so that records and other information can be secured, e.g. lockable cupboards or other operational procedures, when the reception area is unoccupied.

Many services may not be able to support a dedicated reception area. Where provided, these will generally operate during business hours only.

As women and their partners may access the Unit out of hours, a video intercom system will alert the midwives when a woman arrives. Wayfinding from the entry to the birth unit should be easy to navigate and not be reliant on the availability of a reception service.

Visitor amenities will be needed in this area.

2.4.3 Outpatient / Day Stay Services

Maternity outpatient services encompass antenatal and postnatal care including education, counselling and support services.

The arrangement of outpatient services will be dependent on the size and scale of services. Services may range from a few consult rooms through to complex services including consult rooms, day stay services including monitoring and procedures. Tertiary centres may also provide additional services to manage women whose pregnancies may be associated with maternal or fetal complications, known as a maternal fetal medicine unit.

Where a dedicated outpatient service is provided as part of a Maternity Unit, a reception point will be provided with oversight of the entry and waiting area. This reception point will direct visitors to their point of care and act as an access control point.

Larger services may:

- require sub wait areas closer to the point of care; and
- cluster consult, interview and procedure rooms in pods, sharing clinical support where possible.

Facilities may also include a room for education and facilitated group antenatal programs. A midwife-led, birth centre model will include clients being seen at a birth centre, at home or a community setting.

In addition to routine outpatient attendances, it may be necessary for some women to attend hospital during the antenatal period on a day or half-day basis for maternal and fetal assessment and monitoring (CTG), ultrasound, blood tests etc. In small hospitals the ambulatory care unit may be utilised. Large regional centres will have a dedicated unit. These day stay facilities will be a discrete space with patient bays for both beds and chairs. These patient bays will be overseen by a staff base.

Where an assessment or early pregnancy unit is provided, this may be collocated with the maternal fetal medicine service so that access to ultrasound services is facilitated.

2.4.4 Birth Unit

The birth unit is a secure and discrete unit that will include birth rooms, space for family and other support people and other clinical support space. Larger services will provide access to an assessment room and additional bed bays to manage the acute phase of pre and post-delivery care.

Access to the Unit should be restricted to maintain the privacy of mothers during labour and birth. A partner or support person will routinely be present during this time. Some mothers may have additional family members such as children and close friends. A lounge area will be provided in a location adjacent to birth rooms so that visitors can have time alone. Each birth rooms will have an attached ensuite.

Smaller services may be able to share clinical support areas but this should not adversely impact on the physical and acoustic separation needed.

Access to safe outdoor space is ideal to facilitate mobility during labour.

Selected services may provide a dedicated obstetrics operating room. Where provided, this space will be adjacent to the birth unit so that it is not easily seen. Recovery bays will be needed to recover the baby and undertake initial baby health checks.

2.4.5 Inpatient Unit

Where antenatal beds are provided these may be in a separate unit where numbers can support this model or as a module within an inpatient unit with both antenatal and postnatal beds.

Ideally, maternity inpatient units will provide single bed rooms. This supports rooming-in models and allows a partner to stay overnight. Two-bed rooms may be an option where this will positively affect the wellbeing of new mothers, e.g. Indigenous communities. A dedicated ensuite will be provided to all single and two bed rooms.

Postnatal maternity services support a wellness model. Provision of space is important for women to gather, breastfeed and participate in shared groups as part of the promotion of parenting and education for mothers. Clinical support areas for postnatal beds may be shared with the antenatal zone, depending on the functional relationships and Unit size.

2.4.6 Clinical Support Services

Smaller services will be able to share selected utility, storage, disposal and cleaners rooms. Larger services may need to provide these facilities within each part of the service. Within outpatient clinics, dirty utility rooms are not ideal and instead, clean-up rooms are indicated with bench space to manage selected activities.

2.4.7 Staff Areas

Staff areas will include office and support space and a range of staff amenities.

The provision of office space will be dependent on the size and complexity of the service. Ideally, offices will be collocated with a maternity service to promote communication and team based care. Except for selected positions, e.g. unit managers, office space will be provided in staff only accessible areas. Midwives operating in a group practice will ideally be located in a shared office. This will facilitate case management and clinical supervision. Access to meeting rooms will be required to support collaborative case reviews and ongoing education.

Staff will need access to a range of amenities. Staff without dedicated office space will need access to lockers.

Staff working in a birth unit are not required to change so change rooms are not needed. Change facilities will be needed if an operating room is collocated. Staff working in a birth unit may have trouble leaving the unit during extended shifts of up to 12 hours. Ideally a multidisciplinary staff room will be accessible within this Unit.

2.5 FUNCTIONAL RELATIONSHIPS

The Maternity Unit should have ready access to:

- operating theatres; and
- neonatal intensive care and/or special care nursery.

Other functional relationships that need to be facilitated include:

- emergency department;
- clinical support services such as medical imaging, pathology and pharmacy services;
- ambulance transport bays and/or helipad for retrieval services;
- intensive care unit; and
- gynaecological inpatient beds.

03 DESIGN

3.1 ACCESSIBILITY

The assessment unit, birth unit and birth centre require 24 hour access. A direct and dedicated entry with drop-off parking for cars, taxis and ambulances is preferred. Delivery by ambulance should ideally not be via the emergency department. The Birth Centre ideally should have its own entry with internal links to the main Birth Unit (where located on site) and Operating Unit. If these Units do not have dedicated entries, specific arrangements will need to be made for after-hours access.

Access during normal hours should be via the reception area. After-hours access for expectant mothers and their supporters should be via the birth area. After-hours policy may allow restricted access to partners or support persons of mothers in the inpatient area and parents of neonates in the neonatal special care area. Planning should minimise the number of night entrances and ensure that staff and the public can access the Unit at entrances adjacent to car parks to limit the time outside of the facility at night.

3.2 PARKING

Parking and drop-off will be required for:

- ambulances, taxis, private vehicles with women in labour;
- on call staff;
- fleet vehicles used by midwives providing outreach services; and
- deliveries of flowers and gifts.

For staff parking, refer to Part C: Section 790, Safety and Security Precautions.

3.3 DISASTER PLANNING

Each Unit will have operational plans and policies detailing the response to a range of emergency situations both internal and external.

For further information refer to:

- local jurisdiction disaster management plans; and
- AusHFG Part B: Section 80 General Requirements.

3.4 INFECTION CONTROL

Refer to:

- AusHFG Part D Infection Prevention and Control; and
- jurisdiction policies and guidelines related to infection prevention and control.

Tertiary centres may consider including a negative pressure birth room with anteroom should a particular need be identified.

3.5 ENVIRONMENTAL CONSIDERATIONS

3.5.1 Acoustics

Acoustic treatment is essential in the birth rooms to allow the mother to vocalise during labour without this noise being heard in the corridor or adjacent rooms. Refer to the Birthing Room Design information contained at Appendix AX08 for further information.

Crying babies, especially at night, can be a major source of distress to others. Single bed rooms will help reduce this impact.

Refer to AusHFG Part C: Section 03 Space Standards and Dimensions, for further information.

3.5.2 Natural Light

Natural light contributes to a sense of wellbeing for all building occupants including patients, staff and other users.

Higher levels of natural light may help people better orient themselves in the building thus enhancing wayfinding. Glare should be minimised.

3.5.3 Privacy

Ensure that doors to birth rooms when opened do not expose the labouring woman to view by others outside the room when in the bed or birthing pool. Outdoor areas, where provided in an adjacent location to birth rooms, should not allow observation by external onlookers.

3.5.4 Interior Décor

Interior décor includes; furnishings, style, colour, textures, ambience, perception and taste. This can help prevent an institutional atmosphere. However, cleaning, infection control, fire safety, patient care and the patients' perceptions of a professional environment should always be considered.

Birth rooms should provide a calm and safe setting where mothers can control and alter, as much as possible, the room environment. Where possible, the room will be designed to hide medical equipment, e.g. medical gases, monitors etc. Where possible, finishes should be less clinical, e.g. window finishes. Homelike interiors preferred to promote a calm and stress free environment.

Refer to Appendix AX.08 Birth Room Design for further information.

3.5.5 Artwork

Care should be taken in the selection of artwork to ensure no distress to parents who have very sick newborns or who have experienced neonatal death or abnormality. Cultural appropriateness, including Aboriginal families, also needs to be considered.

3.5.6 Wayfinding

Signage for access to the Birth Unit or Birth Centre should be easily identifiable to avoid delay, especially for retrieval teams.

Refer to:

- AusHFG Part C: Section 05 Signage; and
- NSW Health GL2014_018 Wayfinding for Healthcare Facilities, 2014.

3.6 SPACE STANDARDS AND COMPONENTS

3.6.1 Human Engineering

Human engineering covers those aspects of design that permit effective, appropriate, safe and dignified use by all people, including those with disabilities. Refer to AusHFG Part C: Section 730, Human Engineering for further information.

3.6.2 Ergonomics

Maternity Units should be designed and built in such a way that patients, staff, visitors and maintenance staff are not exposed to avoidable risks of injury. The design of a birthing pool will need to consider the safety of mother and baby and staff, including:

- provision of a birthing pool deep enough for water immersion during labour with specific dimensions required to accommodate accidental or planned birth under water, should this be supported by jurisdictional policies. Birth under water is essential for the safety of the baby;
- clinical staff assisting with labour and/or a water birth or assisting the woman out of the birthing pool in an emergency; and
- staff cleaning the birthing pool after use.

Refer to:

- AusHFG Part C: Section 04, Human Engineering; and
- Birthing Room Design information contained at AX08.

3.6.3 Access and Mobility

Women accessing Maternity Units will often have other children with them in prams. Spaces, including waiting areas, should be designed to accommodate prams and wheelchairs.

The design should comply with AS/NZS 1428:2010 Design for Access and Mobility (Set) (Standards Australia, 2010).

3.6.4 Building Elements

Building elements include; walls, floors, ceilings, doors, windows and corridors and are addressed in detail in the section on Building Elements in AusHFG Part C: Section 03, Space Standards and Dimensions.

Floors: Floor waste provided in birth room ensuites will be designed so that obstruction of drainage point is avoided when birth equipment is used, e.g. stools. Birth rooms and operating theatres used for birth will need to consider the slip rating of floors. There is a high risk of slips and falls owing to a range of fluids present, e.g. water from the birthing pool and other body fluids or waste associated with birthing.

Doors and doorways: Ensure that doorways are sufficiently wide and high enough to permit the manoeuvring of beds, wheelchairs, trolleys and equipment without risk of damage or manual handling risks. Doors into the birth room should not contain an observation window so the privacy of occupants is not compromised.

Windows: Birth room windows should be sized so that an outlook is provided, yet the privacy of the woman is protected. Therefore, floor to ceiling windows are not desirable in this case.

3.7 SAFETY AND SECURITY

Consideration of safety and security risks should begin during the planning and design phase of a healthcare facility and should continue to be tested during the construction, use and post occupancy stages.

3.7.1 Safety

Key considerations include:

- procedures to ensure a mother can be removed quickly from a birthing pool, where provided, should her health deteriorate or the need arise. Ideally, slide mats will be provided as they are quick and easy to use. This approach negates the need for ceiling mounted hoist systems;
- locating staff write-up areas within a birth room on the side of the room closest to the entry door;
- use of duress alarms in all birth rooms and where staff work in isolation; and
- spatial allowances should consider the addition of prams. It is very unlikely that parents will leave prams unattended.

3.7.2 Security

Security can be enhanced by incorporating principles of territorial reinforcement, surveillance, space management and access control into design decisions. Additional security may be needed as newborns may be at risk or under child protection arrangements. Considerations include:

- minimising entry and egress doors to all areas with newborn babies. These doors should be controlled with CCTV;
- the use of reed switches, electric locking and video intercom on external doors and entries;
- swipe card readers may be required to both sides of internal doors, to allow access for authorised staff; and
- implementation of a system that provides baby with an electronic tag that notifies staff when the unit boundary is breached. To date, it has been difficult to find a suitable product. Parents will also need to be educated regarding their responsibilities during their hospital stay (i.e. care by parent models).

Specific security procedures should be developed and implemented. The staff station should be located at the main entrance to allow staff to monitor access and egress. Attention should be paid to reception desk security and a duress alarm system.

Good visibility from the staff station to Unit entries is required. The number of relatives / visitors admitted in the area should be controlled by either restricting the number of relatives / visitors attending at any one time and or restricting visiting hours to set times. Courtyards, where provided, should be securely screened / fenced and adequately monitored (from staff station, CCTV, etc.).

For further information refer to AusHFG Part C: Section 06 Safety and Security Precautions.

3.8 FINISHES

3.8.1 General

Finishes in this context refers to walls, floors, windows and ceilings. For further details refer to:

- AusHFG Part C: Section 03 Space Standards and Dimensions; and
- AusHFG Part D Section 04 Surfaces and Finishes.

3.8.2 Wall Finishes

Adequate wall protection should be provided to areas that will be regularly subjected to damage. Particular attention should be given to areas where bed or trolley movement occurs such as corridors, doors, bed head walls, treatment areas, equipment and linen trolley bays.

3.8.3 Floor Finishes

Refer to TS7 - Floor Coverings in Healthcare Buildings, Issue V1.1 (NSW Health, 2009).

3.8.4 Ceiling Finishes

Ceiling finishes should be selected with regard to appearance, cleaning, infection control, acoustics and access to services. Birth rooms may also contain hooks set into the ceiling so that slings can be attached. These slings are used during labour / birth and the hook will need to be strong enough to hold the weight of the women.

3.9 FIXTURES, FITTINGS & EQUIPMENT

3.9.1 Definition

The Room Data Sheets (RDS) and Room Layout Sheets (RLS) in the AusHFG define fixtures and fittings as follows.

- fixtures: items that require service connection, e.g. electrical, hydraulic, mechanical, that include, but are not limited to hand basins, light fittings, medical service panels etc. but exclude fixed items of serviced equipment; and
- fittings: items attached to walls, floors or ceilings that do not require service connections such as curtain and IV tracks, hooks, mirrors, blinds, joinery, pin boards etc.

A detailed RDS and RLS is provided for the birth room and incorporates lessons learned from many recent projects.

While many rooms used across a Maternity Unit are standard components, the nature of the business will affect requirements. For example:

- storage is not required for urinals in dirty utility rooms; and
- hooks in ensuites for equipment such as IV fluids and catheter bags are not needed but may be used to keep kneeling pads off the floor when not in use.

Refer to:

- Standard Components – RDS and RLS for further detailed information;
- Part F: Section 680 Furniture Fittings and Equipment regarding fixtures, fittings and equipment.

3.10 BUILDING SERVICE REQUIREMENTS

3.10.1 General

In addition to topics addressed below, project staff may also refer to:

- Part E: Building Services and Environmental Design; and
- jurisdiction guidelines relating to engineering services.

3.10.2 Air Handling Systems

All components of the Unit should be fully air-conditioned.

Each birth room should ideally have individual air-conditioning systems. If the thermostats are located inside the birth room, the controls should be located out of the reach of children and under the control of the woman and staff. Premature babies may require an ambient room temperature of 26°C once the baby is born although this is typically provided within the infant resuscitaire (Australian and New Zealand Committee on Resuscitation, ANZCOR Guideline 13.8 The Resuscitation of the Newborn in Special Circumstances, 2016)

3.10.3 Electrical Services

It is essential that services such as selected clinical equipment, emergency lighting, telephones, duress alarm systems (including the central computer) and electronic locks are connected to the emergency power supply.

Within the birth room, alarms and other associated requirements should be located so that they do not detract from the domestic feel of the space and are not in the direct line of sight of the women when in the birthing pool, on the bed or leaning on the mantel piece.

3.10.4 Information Technology and Communications

Systems may include:

- a critical care camera located in one birth room so that the clinical team can discuss aspects of care with the neonatal / paediatric retrieval service should this be required;
- wireless technology;
- radiofrequency identification (RFID) for access control etc.;
- duress alarm systems - fixed and / or personal as required;
- nurse / emergency call systems;
- voice / data (telephone and computers);
- videoconferencing capacity / telemedicine;
- electronic medical records;
- picture archiving communication system (PACS);
- patient administration systems (PAS);
- paging and personal telephones replacing some aspects of call systems;
- patient multimedia devices including bedside monitors that function as televisions, computer screens for internet access, etc.;
- bar coding for supplies;
- e-learning and simulation; and
- e-medication management and e storage systems, e.g. automated dispensing systems.

All communication systems should be compatible with existing or planned overall hospital systems including staff and emergency call systems. Annunciator panels should be clearly visible in corridors and be the scrolling type so that all rooms can be seen. However, the ability to control audibility at night should be a criterion when selecting systems.

3.10.5 Hydraulic Services

Warm water systems will be required. The water temperature in the birthing pool will need to be maintained at a comfortable level for the woman who may be in the birthing pool for several hours at a time.

3.10.6 Lighting

Dimmable lighting is essential in all patient areas where high dependency care is provided, i.e. birth assessment rooms, birth room ensuites and bathrooms and baby bathing, examination and resuscitation areas.

3.10.7 Medical Gases

Refer to Standard Components for detailed information regarding medical gases. Service panels at bed and infant resuscitaire are usually enclosed.

For anaesthesia requirements in birth rooms refer to PS 55 Recommendations of Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations (Australian and New Zealand College of Anaesthetists, 2012).

04 COMPONENTS OF THE UNIT

Standard Components Rooms / spaces are defined as:

- standard components (SC) which refer to rooms / spaces for which room data sheets, room layout sheets (drawings) and textual description have been developed;
- standard components – derived rooms are rooms, based on a SC but they vary in size. In these instances, the standard component will form the broad room 'brief' and room size and contents will be scaled to meet the service requirement; and
- non-standard components which are unique rooms that are usually service-specific and not common.

The standard component types are listed in the attached Schedule of Accommodation.

The current Standard Components can be found at: www.healthfacilityguidelines.com.au/standard-components.

4.1 NON-STANDARD COMPONENTS

Non-standard components are unit-specific and provided in accordance with specific operational policies and service demand.

4.1.1 Assessment Room

Description and Function

An assessment room is located in the birth unit and is used to conduct patient examinations and monitor fetal heart beat etc. at the very early stages of labour. It can also be used for the administration of drugs to induce labour.

Location and Relationships

These rooms should be located in close proximity to the staff station to allow ongoing supervision. The assessment room should be in close proximity to birth rooms for ease of transfer when labour is established. An ensuite will be attached.

4.1.2 Bay – Neonatal Resuscitation

Description and Function

This area is an emergency treatment bay in the Birth Unit for babies who are compromised and need emergency intervention / support, e.g. oxygen, resuscitation, and stabilisation prior to transfer to neonatal intensive care unit (NICU).

Location and Relationships

This area should be located centrally within the birth unit, but should have privacy from other women and support persons in the Unit. Plan an appropriate route for transfer / evacuation of the newborn to NICU should it be required.

Considerations

Medical gases, resuscitation and emergency equipment are required. Bench space for write up is also needed.

4.1.3 Newborn Bathing Room

Description and Function

A room for infant examination, demonstration of baby bathing techniques as part of parent craft education. This room may also be used as a combined area for bathing all newborns. Size will depend on operational policy regarding demonstration and whether bathing occurs in mothers' bedrooms.

Location and Relationships

The room may be a separate room in the postnatal zone.

Considerations

Attention to height of benches and mounting of baby baths.

4.1.4 Multipurpose Room

Description and Function

A room provided within a birth unit that can be used for a range of functions such as:

- counselling
- support of a family experiencing perinatal loss.

This room would be configured like a lounge so that it is comfortable for counselling and a family to gather to spend time with the deceased baby.

Location and Relationships

Located within the birth unit.

Considerations

The room would:

- be used to store the cold cot;
- have comfortable seating which may include a sofa bed option;
- have a pleasant outlook; and
- provide some bench space and storage to support a range of activities such as photographs and other related activities.

AX APPENDICES

AX.01 SCHEDULE OF ACCOMMODATION

A schedule of accommodation is shown below and lists generic spaces for this HPU.

In some cases, room / spaces are described as 'optional' or 'o'. Inclusion of this room / space will be dependent on a range of factors such as operational policies or clinical services planning.

ENTRY / RECEPTION / WAITING

ROOM CODE	ROOM/SPACE	SC/ SC-D	Level 3/4		Level 5/6		REMARKS
			Qty	m2	Qty	m2	
RECL-10	Reception / Clerical, 10m2	Yes	1	10	1	12	
WAIT-10	Waiting, 10m2	Yes	1	10	1	12	
BVM-3	Bay – Vending Machine	Yes	-	-	1 (o)	3 (o)	Assume smaller services locate these amenities nearby.
BWD-1	Bay – Water Dispenser	Yes	-	-	1 (o)	1 (o)	Assume smaller services locate these amenities nearby
PAR	Parenting Room	Yes	-	-	1	6	Assume smaller services locate these amenities nearby
WCPU-3	Toilet – Public, 3m2	Yes	1	3	2	3	
WCAC	Toilet – Accessible, 6m2	Yes	1	6	1	6	
	Discounted Circulation		15%		15%		

ASSESSMENT / EARLY PREGNANCY UNIT

This service, where provided will typically be provided in tertiary centres or large regional referral hospitals. Women's hospitals may undertake this type of patient care in an emergency department. Clinical support space such as a reception and utilities will be shared with an adjacent service, e.g. day stay unit and outpatient clinics where provided.

ROOM CODE	ROOM/SPACE	SC/ SC-D	Level 5/6		REMARKS
			Qty	m^2	
WAIT-10	Waiting, 10m2	Yes	1	10	A sub wait / lounge dedicated to this service
CONS	Consult Room	Yes	1	12	
ULTR	Ultrasound	Yes	1	14	
WCPT	Toilet – Patient, 4m2	Yes	1	4	
	Discounted Circulation		32%		

DAY STAY UNIT

This service, where provided, meets the needs of women who experience complications that occasionally may arise during pregnancy which call for short-term monitoring of mother and baby. The pregnancy day stay unit provides for this closer observation, without the need for admission into hospital. For further information relating to outpatient clinics, refer to HPU155 Ambulatory Care Unit.

ROOM CODE	ROOM/SPACE	SC/ SC-D			REMARKS
			Qty	m²	
PBTR-H-9	Patient Bay – Holding, 9m2	Yes	5	9	This will be provided as a mix of beds and chairs
SSTN-10	Staff Station	Yes	1	10	
ENS-ST-A1	Ensuite, 5m2	Yes	1	5	
WCPT	Toilet – patient, 4m2	Yes	1	4	
BBEC-OP	Beverage Bay – Open Plan, 4m2	Yes	1	4	
DTUR-S	Dirty Utility – Sub, 8m2	Yes	1	8	Shared with other ambulatory services and Assessment / Early Pregnancy Unit where provided
CLUR-12	Clean Utility / Medication Room	Yes	1	10	
STGN-8	Store – General, 8m2	Yes	1	8	
BMEQ-4	Bay – Mobile Equipment	Yes	1	4	
	Discounted Circulation		32%		

BIRTH UNIT

The following schedule of accommodation is based on two scenarios including 1,500 and 3,000 births.

Note 1: A total no. of birth rooms has been identified. The type, with or without bath, will be dependent on jurisdictional policies. Both include storage which was previously provided as a separate line item. This is now incorporated into the birth room space.

Note 2: The birth room size would not change should services provide a LDRP model.

ROOM CODE	ROOM/SPACE	SC/ SC-D	1,500 births		3,000 births		REMARKS
			Qty	m²	Qty	m²	
	Assessment Room		1	15	2	15	
BIRM-A	Birth Room – LDR without Bath	Yes	4	34	8	34	Refer Note 1 & 2. Both rooms include storage.
BIRM-B	Birth Room – LDR with Bath	Yes		40.5		40.5	
ENS-BR	Ensuite – Birthing, 7m2	Yes	4	7	8	7	With birth room and Include double shower
ENS-ST-A1	Ensuite, 5m2	Yes	1	5	2	5	With assessment room
	Multipurpose Room		-	-	1	14	Dedicated space for perinatal loss
	Bay – Neonatal Resuscitation		1	12	1	15	Neonates – All medical gases to be provided.
SSTN-14	Staff Station, 14m2	Yes	1	12	1	14	
OFF-CLW	Office – Clinical Workroom	Yes	1	12	1	15	Provide hot desks for visiting staff, e.g. midwives, medical and allied health staff.
OFF-S9	Office – Single Person, 9m2	Yes	1	9	1	9	Unit Manager.
STFS-10	Store – Files, 10m2	Yes	1	6	1	10	
CLUR-12	Clean Utility / Medication Room, 12m2	Yes	-	-	1	14	Assumed smaller services will share this room with IPU
DTUR-10 DTUR-12	Dirty Utility, 10m2	Yes	-	-	1	12	Assumed smaller services will share this room with IPU
FORM	Formula Room	Yes	1	7	1	10	
BPATH	Bay – Pathology	Yes	-	-	1	3	POCT
BMEQ-4	Bay – Mobile Equipment, 4m2	Yes	1	4	2	4	Equipment and trolleys
BLIN	Bay – Linen	Yes	1	2	2	2	
BBW	Bay – Blanket / Fluid Warmer	Yes	1	1	2	1	Collocate with linen bays
BRES	Bay – Resuscitation Trolley	Yes	1	1.5	1	1.5	For adults
STEQ-14	Store Equipment, 14m2	Yes	1	14	1	20	
STGN-9	Store – General, 9m2	Yes	1	12	1	15	Consumables
BBEV-ENCL	Bay Beverage – Enclosed, 5m2	Yes	1	5	1	5	Accessible by families and located alongside lounge

DISP-8	Disposal Room, 8m2	Yes	-	-	1	8	To be shared with Ante / Postnatal
CLRM	Cleaner's Room, 5m2	Yes	1	5	1	5	To be shared with Ante / Postnatal in services with up to 1,500 births.
LNPT-10 LNPT-20	Lounge – Patient / Family, 20m2		1	12	1	20	
MEET-L-20	Meeting Room, 20m2	Yes	-	-	1	20	Meetings and education
SRM-15	Staff Room, 15m2	Yes	-	-	1	15	May be shared with Ante / Postnatal, especially in L3/4 services
WCST	Toilet – Staff, 3m2	Yes	-	-	2	3	To be shared with Ante / Postnatal in services with up to 1,500 births.
SHST	Shower – Staff, 3m2	Yes	-	-	1	3	
PROP-2	Property Bay – Staff, 2m2	Yes	-	-	1	3	
	Discounted Circulation		35%		35%		

INPATIENT UNT – ANTENATAL / POSTNATAL

Typical scenarios based on 10 and 28 bed units for both antenatal and postnatal services. Mix of single and 2 bed rooms will be dependent on jurisdictional approaches however a high proportion of single bed rooms is usually preferred. Centralised visitor amenities assumed to support the range of services.

ROOM CODE	ROOM/SPACE	SC/ SC-D	Level 3/4		Level 5/6		REMARKS
			Qty	m²	Qty	m²	
1BR-ST	1 Bed Room, 16.5m2	Yes	7	16.5	24	16.5	
1BR-SP-A	1 Bed Room – Special, 18m2	Yes	1	18	2	18	This size room may also be used to accommodate a partner sleeping over
2BR-ST	2 Bed Room, 25m2	Yes	1	28 (o)	1	28 (o)	Optional
ENS-ST	Ensuite – Standard, 5m2	Yes	9	5	27	5	Depends on number of 1 bed rooms (standard).
LNPT-10 LNPT-20	Lounge – Patient / Family, 20m2	Yes	1	12	1	20	May be used for dining and education.
	Bathing - Newborns		1	12 (o)	1	20 (o)	Depends on local model. Refer to Section 02.01 Bathing Newborns
SSTN-14	Staff Station, 14m2	Yes	1	12	1	14	
OFF-CLN	Office – Clinical Workroom	Yes	1	12	1	15	
BHWS-B	Bay – Handwashing, Type B	Yes		1		1	Corridor locations. No. to be based on design
	Milk Store		1	8	1	10	Staff only accessible area
	Formula Room		1	6	1	8	
BFLW-OP	Bay - Flowers	Yes	1	2 (o)	1	2 (o)	Optional. Flower may instead be managed in dirty utility
STEQ-14 STEQ-20	Store – Equipment, 14m2	Yes	1	14	1	20	Spare bassinets, transport humidicrib.
STGN-8	Store – General, 8m2	Yes	1	8	1	9	Bulk items etc.

BBEC-OP	Beverage Bay – Open Plan, 4m2	Yes	1	4	1	4	Collocate alongside lounge
BMT-4	Bay – Meal Trolley	Yes	1	4	1	4	
DTUR-10 DTUR-12	Dirty Utility	Yes	1	10	1	12	
CLUR-12 CLUR-14	Clean Utility / Medication Room	Yes	1	12	1	14	
BLIN	Bay – Linen	Yes	1	2	2	2	
BRES	Bay – Resuscitation	Yes	1	1.5	1	1.5	For adults
CLRM-5	Cleaner's Room, 5m2	Yes	-	-	1	5	May be shared with Birth Unit.
	Discounted Circulation		35%		35%		

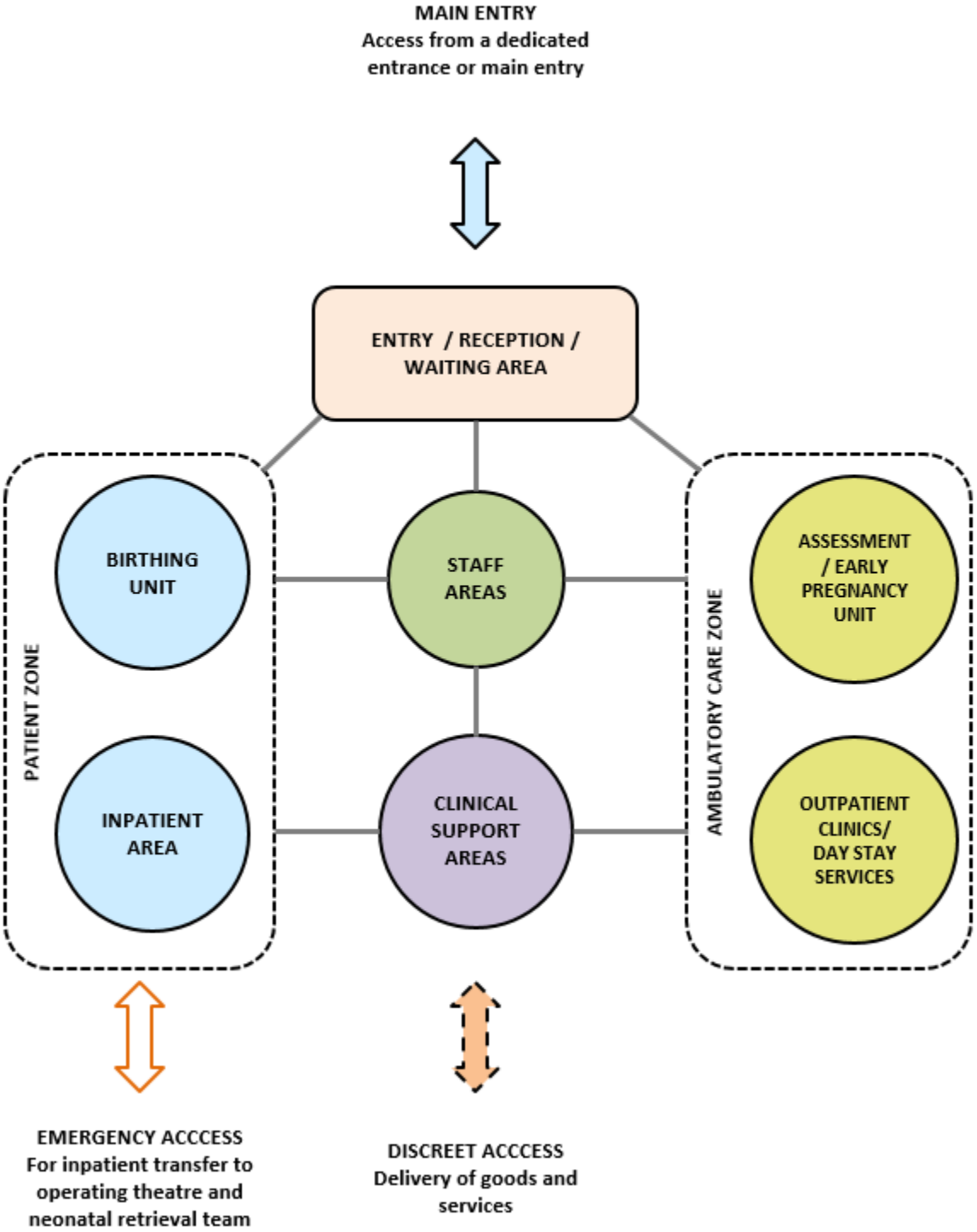
These facilities may be shared between Antenatal and Postnatal Units, decentralised to each Inpatient Area, or a combination of both, depending on Unit bed numbers and functional relationships. Some rooms may also be shared with the Birth Unit, depending on Unit size and functional relationships.

STAFF AREAS AND AMENITIES

This list is indicative only and will be dependent on local arrangements, management structures and staff profiles

ROOM CODE	ROOM/SPACE	SC/ SC-D	Level 3/4		Level 5/6		REMARKS
			Qty	m^2	Qty	m^2	
MEET-L-15 MEET-L-20	Meeting Room	Yes	1	15	1	20	Adjust size to suit establishment. Consider location between postnatal and antenatal.
OFF-S9	Office – Single Person, 9m2	Yes	1	9	1	9	e.g. Unit Manager
OFF-2P	Office – 2 Person Shared, 12m2	Yes	1	12	1	12	e.g. Clinical Nurse Consultant, nurse educator etc.
	Office - Workstation			4.4 or 5.5		4.4 or 5.5	e.g. administration staff
SRM-15 SRM-18	Staff Room, 15m2	Yes	1	15	1	18	May be shared with Birth Unit.
WCST	Toilet – Staff, 3m2	Yes	2	3	2	3	
PROP-2	Property Bay – Staff	Yes	1	2	1	3	
STPS-8	Store Photocopy / Stationary, 8m2	Yes	1	8	1	8	May be shared with Birth unit.
	Discounted Circulation		25%		25%		

AX.02 FUNCTIONAL RELATIONSHIPS / DIAGRAMS



AX.03 CHECKLIST

For planning checklists, refer to Parts A, B, C and D of the Guidelines.

AX.04 REFERENCES

- AHIA, 2016, Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, Australasian Health Facility Guidelines (AHIA, 2016), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, Part E: Building Services and Environmental Design, Australasian Health Facility Guidelines (AHIA, 2016), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
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AX.05 FURTHER READING

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- NSW Health PD2010_045 Maternity, Towards Normal Birth in NSW, 2010

College Statements

- Australian College of Midwives Position Statement on the use of water immersion for labour and birth, 30 May 2013;
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AX.06 MATERNITY SERVICES MAJOR MODEL CATEGORIES

The following information is an extract from the Maternity Care Classification System published by the Australian Institute of Health and Welfare.

Model	Description
Private obstetrician (specialist care)	Antenatal care provided by a private specialist obstetrician. Intrapartum care is provided in either a private or public hospital by the private specialist obstetrician and hospital midwives in collaboration. Postnatal care is usually provided in the hospital by the private specialist obstetrician and hospital midwives and may continue in the home, hotel or hostel.
Private midwifery care	Antenatal, intrapartum and postnatal care is provided by a private midwife or group of midwives in collaboration with doctors in the event of identified risk factors. Antenatal, intrapartum and postnatal care could be provided in a range of locations including the home.
General Practitioner obstetrician care	Antenatal care provided by a GP obstetrician. Intrapartum care is provided in either a private or public hospital by the GP obstetrician and hospital midwives in collaboration. Postnatal care is usually provided in the hospital by the GP obstetrician and hospital midwives and may continue in the home or community.
Shared Care	Antenatal care is provided by a community maternity service provider (doctor and/or midwifery staff under an established agreement, and can occur both in the community and in hospital outpatient clinics. Intrapartum and early postnatal care usually takes place in the hospital by hospital midwives and doctors, often in conjunction with the community doctor or midwife (particularly in rural settings).
Combined Care	Antenatal care provided by a private maternity service provider (doctor and/or midwife) in the community. Intrapartum and early postnatal care provided in the public hospital by hospital midwives and doctors. Postnatal care may continue in the home or community by hospital midwives.
Public hospital maternity care	Antenatal care is provided in hospital outpatient clinics (either onsite or outreach) by midwives and/or doctors. Care could also be provided by a multidisciplinary team. Intrapartum and postnatal care is provided in the hospital by midwives and doctors in collaboration. Postnatal care may continue in the home or community by hospital midwives.
Public hospital high risk maternity care	Antenatal care is provided to women with medical high risk / complex pregnancies by maternity care providers (specialist obstetricians and/or maternal-fetal medicine subspecialists in collaboration with midwives) with an interest in high risk maternity care in a public hospital. Intrapartum and postnatal care is provided by hospital doctors and midwives. Postnatal care may continue in the home or community by hospital midwives.
Team midwifery care	Antenatal, intrapartum and postnatal care is provided by a small team of rostered midwives (no more than eight) in collaboration with doctors in the event of identified risk factors. Intrapartum care is usually provided in a hospital or birth centre. Postnatal care may continue in the home or community by the team midwives.

Midwifery Group Practice caseload care	Antenatal intrapartum and postnatal care is provided within a publicly-funded caseload model by a known primary midwife with secondary backup midwives providing cover and assistance with collaboration with doctors in the event of identifies risk factors. Antenatal care and postnatal care is usually provided in the hospital, community or home with intrapartum care in a hospital, birth centre or home.
Remote area maternity care	Antenatal and postnatal care is provided in remote communities by a remote area midwife (or a remote are nurse) or group of midwives sometimes in collaboration with a remote area nurse and/or doctor. Antenatal care may also be provided via telehealth or fly-in-fly-out clinicians in an outreach setting. Intrapartum and early postnatal care is provided in a regional or metropolitan hospital (involving temporary relocation prior to labour) by hospital midwives and doctors.

AX.07 ASSESSMENT OF BIRTH ROOM NUMBERS

The anticipated number of births as determined in the Service Plan, average lengths of stay, number of elective caesarean sections booked directly into the operating suite thus bypassing the Birth Unit, policies re early discharge programs and management of planned inductions of labour will all affect:

- the number of birth rooms required; and
- the number of postnatal inpatient beds required.

The following is based on the LDR model and assumes approximately one delivery per room per 24 hours, although this will vary from unit to unit:

- 1,000 births - three birth rooms plus one assessment;
- 1,500 births - four birth rooms plus one assessment;
- 2,000 births - five birth rooms plus one assessment; and
- 3,000 births - eight birth rooms plus one to two assessment rooms.

AX.08 BIRTH ROOM DESIGN

BIRTH ROOM

Giving birth and being born are probably the most dramatic experiences of a lifetime. Supportive resources that constitute an ambient environment with appropriate lighting, sound and colour are essential for the mother and particularly the baby, after his / her nine months of relative peace and darkness.

Domestic colours reflective of nature, natural aromas, personally selected music and soft lighting will contribute to a calm atmosphere.

Accommodation needs to provide space for the woman to move freely and change position (as she would at home) and should be able to accommodate standing, walking, sitting, kneeling, squatting, lying down and semi recumbent positions. Each activity / position may require various kinds of support such as a birth stool, leaning place / mantel piece, chairs, beanbags, floor mat, Swiss ball or a sling hung from the ceiling,

The hospital bed will not be the central focus of the room.

Other requirements include:

- visual privacy from corridor and control over who enters the room ('please knock' sign). Observation windows should not be used;
- acoustic management in and between rooms and from the room to the corridor including solid core doors with high grade door seals and walls to 50DB acoustic rating ;
- control of lighting through dimmable systems;
- a fixed procedure light over the bed. Alternative products that are less intrusive may be possible;
- natural light and, where possible, views;
- individual control of room temperature;
- bed is not the first object seen on entering the room (implies this is where woman must position herself)
- space to walk around in the room and to adopt a range of positions,
- access to the outdoors where possible
- ability to change furniture (room to move the bed away from centre of room when not in use) and fittings within the space (such as mattress, pillows, bean bag, Swiss balls, grab rails or shelves) or bring items from home (such as bed cover / doona with familiar / personal odour which is comforting and calming);
- benches with curved edges at various levels for leaning / squatting;
- domestic décor as much as possible: colours, artwork;
- music: CD player, MP3 docking station and possibly TV / DVD for supporters, if not the mother;
- aromatherapy using electric burner;
- access to an ensuite with shower and birthing pool within the room - not the ensuite (refer to details below)
- concealed gases and equipment, including newborn resuscitation equipment;;
- access to drinks and refreshments for mother and supporters;

- space for family members including children, both inside the birthing room and outside. A day bed may be used for rest at various stages of the labour by supporters;
- ensuring all windows have domestic style window coverings for privacy
- bench space for point of care documentation which will include access to networked computers for staff.
- a single entry door to the room is preferred. Birth bed dimensions are typically 234cm wide, 91cm wide (without rails) and 99cm (with rails raised). The bed can manage weight of up to 227kg.

BIRTHING POOLS

Each health service will develop policies regarding the use of water for pain relief during labour and water birth should it occur. Birthing pool are an integral feature of the Birth Room. Features include:

- a birthing pool that allows the woman to fully immerse in the water and change positions and deep enough for a woman on hands and knees to have her pelvis completely covered if the baby is born in the water (must be completely submerged- not half in and half out).
- access should be provided on three sides of the birthing pool
- the birthing pool should be able to be filled quickly and the temperature of the water maintained
- owing to the shape and set out of the birthing pool, an extended wide bore tap may be needed. When not in use, this should be pushed out of the way so that it is not used as a support.
- medical gases will be located at the birthing pool
- an emergency and staff assist button will be provided at the birthing pool
- ceiling hoists are not ideal and transfer matts are a better choice to get the woman out of the birthing pool quickly should her condition deteriorate
- rapid emptying is not so important. Should a women become distressed, the matts require the birthing pool to be full so that buoyancy is provided and the women is easily transferred to a trolley;
- the birthing pool surface should be smooth and impervious and easy to clean.
- consideration must be given to how the midwife will position herself in order to monitor the fetal heart while the woman is in the birthing pool. Design and equipment should support ergonomically optimal practices.
- non slip flooring needs to be provided immediately adjacent to the birthing pool

BIRTH ROOM ENSUITES

A dedicated ensuite should be provided to each birthing room. Features include:

- grab rails on each wall of the shower recess. This should be set at a height that allows the woman to squat and hold onto the rails;
- two shower heads with hoses should be fitted so the woman can position to gain the most relief;
- the water waste should be designed so it is not obstructed should the women choose to use equipment such as a birthing stool or Swiss ball in the shower;

- the rooms should be sized to allow for a support person or for a midwife should the baby be born in the shower;
- toilet does not need the grab rail surrounds as found in inpatient units since these may impede access to the assist the birth of the baby (who might emerge while the mother is on the toilet)

For additional information refer to Your Birth Space: How to plan, negotiate and create an optimal birth environment, Queensland Centre for Mothers & Babies