Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning

0510 - Maternity Unit

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Australasian Health Facility Guidelines

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01 INTRODUCTION

01.01 Preamble

This Health Planning Unit (HPU) has been developed for use by project staff (architects, planners, engineers, project managers and other consultants) and for end users, to facilitate the process of planning and design.
It is intended to assist with the planning and design of a unit that will be fit for purpose in accordance with its designated service delineation / capability and defined catchment population.
This HPU an update of the Maternity HPU developed for NSW Health and issued for Australasian use in 2006. Its development has been informed by an extensive background research and consultation process.
It should be read in conjunction with the Australasian Health Facility Guidelines (AusHFG) generic requirements and Standard Components described in:

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

EXCLUSIONS
The following services and facilities may be established in major teaching / tertiary women's centres but are excluded from this HPU:

- reproductive /infertility units;
- clinical genetics units; and
- birthing centres (as differentiated from a Maternity Unit).

TERMINOLOGY
'Maternity' encompasses the disciplines of obstetrics and midwifery and is used to represent both.
'Obstetrics' is generally only used in references.
In the context of this HPU, the term 'birthing room' has been used to describe a room designed to support any woman through labour, birth and the early postnatal period.
'Birthing Centre' refers to a discrete unit, usually midwife-managed and led, providing for more natural 'at-home' style antenatal care, birth and immediate postnatal care for women accepted into the programme. In the context of this HPU, it is assumed that Birthing Centres are located on a healthcare campus so that more intensive midwifery and obstetric care are readily available should an emergency arise. Birthing Centres, however, are not described in detail in this HPU and no schedule of accommodation is provided.

RELATED PLANNING UNITS
The schedule of accommodation in the original HPU gave details of a Level 2 nursery. This has been omitted from this revision as details are available in HPU 390 Intensive Care - Neonatal Special Care Nursery.
The original version also gave a schedule of accommodation for an obstetric operating unit. These details are also omitted. Refer to HPU520 Operating Unit.

01.02 Introduction

GENERAL
Maternity is the branch of health care which provides services for the management of pregnancy including pre-conception counselling and care; onset of labour and birth; the postnatal period and parenting; and immediate care of the newborn. It encompasses the total needs of the pregnant woman and her family, including the physical, educational and psycho-social requirements, irrespective of the care setting.

01.03 Policy Framework

GENERAL
Policies for the provision of healthcare services are formulated in accordance with the following principles:

- appropriate service models that ensure a comprehensive service network throughout state and regional health jurisdictions;
- safe and effective care that minimises both staff and patient risks;
- provision of a safe and efficient environment that minimises risk to all users of the facility;
- deployment of resources in a fair and cost effective manner to optimise health outcomes; and
- development and support for enhanced information systems to monitor, plan and evaluate healthcare services.

Policy frameworks recognise the diversity of the community and that special groups within communities often require specific consideration to meet their needs and to enhance the effectiveness of any services provided.

INTEGRATED CLINICAL NETWORKS
A Reform Proposal for Maternity Services in Australia (Boxall, A and Russell, L, 2009) states the following: "Each state and territory needs to develop arrangements for fully integrated clinical networks in public maternity care. These networks should take into consideration state demographics, the type and distribution of maternity facilities, availability of maternity beds and workforce. They should outline detailed procedures for responding to changes in maternal and / or neonatal risk, and outline transport options for women and babies requiring non-urgent transfer to another facility (e.g. community transport schemes and neonatal transport services), and urgent transfer (e.g. using land and air ambulance services)."

MATERNITY POLICIES
Before embarking on a project, planners and project staff are encouraged to familiarise themselves with individual jurisdiction reports on maternity services (refer to References and Further Reading) and to the 2009 Commonwealth Report, Improving Maternity Services in Australia, Report of the Maternity Services Review (Department of Health and Ageing, 2009).
Overarching policies include the Disability Discrimination Act 1992, Act No. 135 of 1992 as amended (Australian Government, 2013).

01.04 Description

DESCRIPTION OF MATERNITY HEALTH PLANNING UNIT (HPU)
The revised HPU addresses the services and facilities for the care of mothers and newborns and also addresses the needs of partners, supporters and staff, provided in a Maternity Unit with a conventional Birthing Unit.
A typical Maternity Unit includes a Birthing Unit, Antenatal Inpatient Area and Postnatal Inpatient Area, which together provide for the care of mothers with antenatal or postnatal complications requiring acute inpatient care, as well as healthy mothers having normal deliveries and healthy newborns ('unqualified babies'). Babies requiring ongoing care will be transferred to the appropriate level of neonatal nursery as may healthy newborns of mothers unable for whatever reason to room-in and newborns that will be put forward for adoption. (Level 1 General Care Nursery).

PATIENT CHARACTERISTICS
Planning will need to address the needs of all women of childbearing age but some women have special needs which may be more related to the care provided rather than any specific facility needs.
Categories with special needs include:

- Aboriginal and Torres Strait Islanders in Australia, and Maori and Pacific Islanders in New Zealand;
- women who are socially disadvantaged particularly in rural and remote communities;
- women from culturally diverse and non-English speaking backgrounds (NESB);
- women with physical and cognitive disabilities including obese (bariatric) patients;
- women with pre-existing medical conditions;
- women with medical conditions associated with pregnancy (pre-eclampsia, etc.) who may require ongoing antenatal inpatient care;

- women with drug and alcohol dependencies;
- women with mental health issues;
- women in correctional facilities;
- women who are experiencing fertility problems;
- women who are undergoing terminations for foetal abnormalities (terminations for medical or psychological reasons are usually performed in the private sector, however in South Australia, they are also done in the public sector);
- women experiencing stillbirths or deaths in utero needing ongoing maternity care;
- women relinquishing babies for adoption - also needing ongoing maternity care; and
- women with same sex partners.

There are special needs associated with pregnancies resulting from rape, and with pregnancy in very young women.

ABORIGINAL AND TORRES STRAIT ISLANDERS
For additional details, refer to the literature review undertaken on behalf of the Department of Health and Ageing (Herceg 2009).
The importance of the role of the grandmother needs to be recognised. Grandmothers teach their granddaughters about local Aboriginal traditions.
Models of care for Aboriginal and Torres Strait Islanders would be reflected in the local Aboriginal and Torres Strait Islanders cultural needs (e.g. birth smoking ceremonies, values, culture and the spirituality of birth). Additional space may be required in inpatient bedrooms to allow a grandmother to stay with her granddaughter. A ground floor location with outdoor access is preferred.

CULTURE / ETHNICITY
Various ethnic groups, particularly migrant and refugee women, have differing customs associated with pregnancy, birth and the postnatal period. These need to be acknowledged and accommodated wherever possible although this may be more an attitude to care rather than any specific facility needs (Cultural Birthing Practices and Experiences (Boules, N, 2007)).

WOMEN WITH DISABILITIES
Patients may include women with physical, sensory or learning disabilities. Refer to:

- The Reproductive Rights of Women with Disabilities (Thomas, N, 2004); and
- UK website of ‘Good Practice: Meeting Cultural Needs, Disability, Pregnancy & Parenthood Journal, Vol 64 (Disability, Pregnancy & Parenthood, 2008).

There is a growing need for at least one room in inpatient units and the birthing unit to be fully wheelchair accessible and in compliance with Disability Discrimination Act 1992, Act No. 135 of 1992 as amended (Australian Government, 2013).

WOMEN WITH MENTAL HEALTH ISSUES
Identified mental health issues may be pre-existing conditions or a consequence of the pregnancy, both antenatal and postnatal. Consider access to single rooms, the need for specialling, access to NICU or special care nursery if necessary and maintenance of postnatal care and education. Consider postnatal accommodation in a Mother and Baby Unit (A National Approach to Perinatal Mental Health in Australia: Exercising Caution in the Roll-out of a Public Health Initiative, Medical Journal of Australia (Yelland et al, 2009)).
Clinical issues concern adequate antenatal care, use of medications while pregnant and/or nursing, maternal bonding, and coordinated treatment planning among medical, addiction, and mental health treatment providers (Antenatal Ambroxol Treatment does not Prevent the Respiratory Distress Syndrome in Premature Infants, European Journal of Pediatrics, Vol 156, Issue 5, pp392-392 (Dani C1, Grella PV, Lazzarin L, Rubaltelli FF, 1997)).

WOMEN WITH DRUG AND ALCOHOL DEPENDENCIES
Women with existing and pre-existing drug and alcohol dependencies may require access to single room accommodation with close supervision during admission.
Clinical concerns would be similar to the identified reference of Women with mental health issues.
Consideration needs to be given to:

- managing clients who may be experiencing withdrawal from drugs and/or alcohol who may be violent;
- access and supply of drugs and alcohol from external sources e.g. Visitors; and
- access to support services while an inpatient.

WOMEN IN CORRECTIONAL FACILITIES OR UNDER HEALTH CARE ORDERS
Consideration needs to be given to:

- managing possible violence of patients and partners - issues of safety and security of units, internal space and access to units; and
- location of the unit - particularly relevant to services close to women's correctional service and maternity services being provided by that public service.

FACTORS AFFECTING PLANNING AND DESIGN
The following are not traditional priorities but are a reflection of changes in society and may have an increasing impact on design:

- continuing change in the composition of the maternity population with a higher percentage of older women having first and subsequent pregnancies;
- women with complex pregnancies, particularly multiple births and prematurity;
- early discharge and community care programmes that transfer services from the hospital to a community setting;
- birthing options and the concept of 'birth territory' (Birth Territory: A Theory for Midwifery Practice, Women and Birth, Vol 19, Issue 2, pp45-50 (Kathleen Fahy, Jenny Parratt, Maralyn Foureur, Carolyn Hastie, 2006));
- increase in planned induction of labour;
- increase in elective caesarean sections as a birthing option;
- increasing emphasis on mental health and well-being including diagnosis and treatment of antenatal and postnatal depression;
- managing clients with drug and alcohol toxicity;
- increasing use of alternatives to pain management;
- increasing concerns about infant safety and possible abduction.;
- Aboriginal and Torres Strait Islanders cultural needs (e.g. birth smoking ceremonies, values, culture and the spirituality of birth); and
- facilities to support the birthing smoking ceremonies as relevant to a jurisdiction.

AMBIENCE
Overall unit / centre design should recognize the pivotal role of the parents and other family members as part of the whole process of pregnancy, birthing and post-natal care. Planning and design should:

- create a welcoming environment in all parts of the Maternity Unit;
- provide adequate space and facilities for families;
- allow for privacy and encourage physical infant contact;
- provide quiet facilities for counselling, grieving and care planning;
- provide retreat facilities for patients and staff; and
- facilitate patient to staff and staff to staff communications.

BED CATEGORIES
The range of beds in a Maternity Unit excluding cots may include:

- inpatient beds - antenatal and postnatal;
- beds for women who have had a stillbirth, death in utero or relinquished a baby for adoption. Ensure that these beds are not located near those of women with healthy babies;
- day only / ambulatory care beds or chairs for maternal and foetal monitoring;
- beds / trolleys for assessment of problems of early pregnancy (threatened miscarriage etc.) and for women in pre-term or premature labour (before 37 weeks gestation) with attendant possible need to halt or delay labour until the foetal lungs are better developed. If labour cannot be halted, arrangements may need to be made for transfer of the premature infant;
- beds for women undergoing planned induction and in very early labour who do not need to be in a birthing room until labour is established ;

- birthing rooms; and
- beds for women transferred in from other centres accompanying a sick infant, who may still need some level of ongoing maternity care but do not need an expensive inpatient bed.

ANTENATAL CARE
One of the main objectives of antenatal care is the early detection of risk factors and referral to the appropriate level of care. This may require:

- visits to midwife, GP, obstetrician in hospital or community setting;
- day stay monitoring of mother and/or foetus including CTG (cardio tocography), ultrasound, pathology, blood pressure;
- exercise and parent education classes - in hospital or community;
- relaxation therapies, many of which are conducted in the private sector; and
- hospitalisation. Hospitalisation, sometimes for extended lengths of stay, may be required for a range of conditions including:
- pre-eclampsia (high blood pressure);
- gestational Diabetes Mellitus;
- placental abnormalities (praevia, placenta accrete);
- hyperemesis (extreme nausea and vomiting); and
- treatment and monitoring of pre-existing medical conditions.

POSTNATAL CARE
Postnatal care may include:

- general recovery in an inpatient unit for caesarean sections, sick mothers and general mother care;
- mothercraft and parent education (bathing, breast feeding);
- lactation support; and
- community / home-based follow-up.

Postnatal community-based midwifery services are now offered by most units. Services may be just for routine early discharge follow-up or may be provided to women who require further supervision after hospitalisation for a range of reasons. It will need to be ascertained whether the midwives are accommodated in the Maternity Unit or in the community so that in the former instance appropriate office space and storage can be provided.
Early discharge is generally defined as discharge from a maternity unit within 48 hours of giving birth.

BIRTHING ROOMS
Birthing rooms may be used in a flexible way to accommodate different service models and approaches with some used for the labour, birth and recovery phases with transfer to a post natal bed. The room may also be used for the labour, birth and recovery phases, with the mother occupying the room until discharge.
These rooms need to accommodate multiple births and a peninsula bath.

ASSESSMENT OF BIRTHING 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 Birthing Unit, policies re early discharge programmes and management of planned inductions of labour will all affect:

- the number of birthing 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 birthing rooms plus one assessment;
- 1,500 births - four birthing rooms plus one assessment;
- 2,000 births - five birthing rooms plus one1 assessment; and
- 3,000 births - eight birthing rooms plus one to two assessment rooms.

South Australian experience suggests that for 3,000 births there is a need for 10 birthing rooms. Birthing room numbers and assessment room numbers should be decided by individual jurisdictions at the planning stage.

The schedule of accommodation has been developed for four and eight birthing rooms.

BIRTHING ROOM DESIGN
Birthing rooms should be designed and fitted so that women may use them much as they would use their own homes. Requirements include:

- privacy: visual from corridor and control over who enters the room ('please knock' sign);
- acoustic management in and between rooms;
- control of lighting: dimmable, no fixed operating light but portable available. Natural light and, where possible, views;
- individual control of room temperature;
- space to walk around in the room;
- varying furniture and fittings: mattress, pillows, bean bag, swiss balls, grab rails or shelves / benches with curved edges at various levels for leaning / squatting;
- décor: colours, artwork;
- music: CD player, possibly TV / DVD for supporters, if not the mother;
- aromatherapy;
- en suite with double shower;
- optional bath: refer to relevant section in this HPU;
- concealed gases and equipment;
- access to drinks and refreshments for mother and supporters;
- space for family members including children, both inside the birthing room and outside;
- appropriate bed position;
- bench space for point of care documentation; and
- discreet storage in and between birthing rooms.

BIRTHING ROOM BED
The bed should NOT be the focal point of the room.
Refer to Re-Conceptualizing the Hospital Labor Room: The PLACE (Pregnant and Laboring in an Ambient Clinical Environment) Pilot Trial, Birth, Vol 36, Issue 2, pp159-166 (Hodnett, E. D., Stremler, R., Weston, J. A. and McKeever, P, 2008)) detailing the Canadian concept of "ambient" birthing room '... beds in labor (sic) rooms were more for the convenience of the medical and nursing staff than the health of the mothers'.

THE IDEAL BIRTHING ROOM
Giving birth and being born are probably the most dramatic experiences of a lifetime. Appropriate lighting, sound and colour are essential for the mother and particularly the baby, after his / her nine months of relative peace and darkness.
Healing colours, natural aromas, gentle music and soft lighting will help to keep the atmosphere calm. Lights should be turned down as low as possible when birth starts to take place, providing there are no complications so that the baby can gradually be introduced to light and sound.

02 PLANNING

02.01 Operational Models

HOURS OF OPERATION
The Maternity Inpatient Units, Assessment Units and the Birthing Unit will provide service 24 hours per day, seven days per week with admissions occurring around the clock.

MODELS OF CARE: FACILITIES
The arrangement of units and sub-units will depend on service role and capability. It should be noted that the number of anticipated births does not necessarily reflect a level of service. In most tertiary centres the highest proportion of births are women from the local catchment having normal births and for whom the Unit is their local maternity unit. Location (metropolitan, rural or remote) and client profiles and culture may affect the type of unit required.

WOMAN CENTRED CARE
Women are increasingly articulating the need for choice and access to consistent information with regard to the type of birth they wish to have. They also wish to control the labour and delivery process and the place of birth (Birth Territory: A Theory for Midwifery Practice, Women and Birth, Vol 19, Issue 2, pp45-50 (Kathleen Fahy, Jenny Parratt, Maralyn Foureur, Carolyn Hastie, 2006)). There is also increasing recognition of the difference between 'being delivered' and 'giving birth'.
Their choices include: the place or environment where they give birth (home, hospital birthing unit, birthing centre); choice of 'operator' (obstetrician or midwife), choice of support (partner, friend, doula). Refer to Australian Doula College (website) (Australian Doula College, 2015).

MODELS OF MATERNITY CARE
Maternity services may be delivered in a number of ways that may have greater or lesser implications for organisation of facilities and provision of offices and workstations. Continuity of care should underline all models of care, defining the functional relationship between the identified birthing options.
These models include:

- midwife case load and midwife-managed care;
- group midwives;
- shared care (this may be shared by the midwife and/or medical practitioner and may include an Aboriginal Health Worker);
- multi-disciplinary team - discipline mix and size;
- obstetrician-led care; and
- continuity of care (defined as the provision of care by the same small team of caregivers throughout pregnancy) ('It's More than just having a Baby' Women's Experiences of a Maternity Service for Australian Aboriginal and Torres Strait Islander Families, Midwifery, Vol 28, Issue 4, pp449-455 (Homer, Caroline S.E. et al, 2012)). Continuity of care and consistent information is essential to the provision of care that is culturally sensitive and appropriate.

Maternity care may be accessed via clinics located at hospitals, community health centres or GP practices and the model selected may depend on the risk factors inherent in the pregnancy noting that risk factors may change rapidly.

CENTERING (SIC) PREGNANCY PROGRAM FOR ANTENATAL CARE
This model is based on providing group antenatal care.
Access is required to a room large enough for 8-10 women seated plus space for examination - may be a floor mat or adjoining exam room. This space may be in the ambulatory care part of a hospital or in the community. For more details on the Centering Care Model refer to Centering Care Model Overview, Website (Centering Healthcare Institute, 2015).

BIRTH CENTRES
The Commonwealth has asked States and Territories to increase the number and use of birth centres as part of the implementation plan of the Improving Maternity Services in Australia, Report of the Maternity Services Review (Department of Health and Ageing, 2009). It is essential that the birth centre philosophy is

considered as part of this exercise, including continuity of care which should be able to underline all models of care and home-from-home environment. Centres are usually located on a hospital campus (either free-standing or in-hospital) and provided through various jurisdictional programmes or the private sector. In this way, more intensive medical care is immediately available should an emergency arise and are only available to pregnancies considered low risk.
Whilst this HPU acknowledges birth centres as a potential component of the model of care, they are not described in detail. Rather, this HPU addresses conventional Maternity Units located in-hospital including a detailed schedule of accommodation.

HOME BIRTHS
There has been much discussion and debate regarding home births, the pros and cons of which are outside the scope of this document. However, where centres do provide a home birth programme, consideration will need to be given to the following:

- offices / workstations for a programme co-ordinator and midwives;
- access to seminar rooms for lectures and practical skills training such as suturing
- storage for supplies and delivery packs; and
- access to transport 24 hours per day.

Refer to the evaluation of a programme in NSW (Evaluation of the Publicly-funded Homebirth Program in South East Sydney Illawarra Area Health Service (Homer, Caroline and Caplice, Shea, 2009) https://www.uts.edu.au/sites/default/files/stgeorge-homebirth.pdf
Planned home births will need to be registered with the relevant maternity unit and provision made to accept and accommodate women and neonates in case of maternal or foetal emergency. Unplanned home births also occur if the woman cannot get into hospital on time or where no antenatal care has been undertaken. Intra services arrangements coordinated with maternity services are necessary to support the mother and child's safe journey.
It should be noted that the College of Obstetrics and Gynaecology does not support home births unless very strict criteria are met (Categorisation of Urgency for Caesarean Section (RANZCOG, 2015)).

FUTURE DEVELOPMENTS
Future developments include:

- increasing technological support / equipment;
- increasingly sophisticated information systems;
- increasing rate of pre-term delivery (in part at least because of older maternal age);
- increased survival rates of all gestational ages;
- increase in multiple births;
- earlier discharge with community support;
- increased requirement for staff study / in service;
- nurse practitioners; and
- more demand for families to live in.

There is a growing international trend towards birthing as a same-day procedure. In Australia there is currently a lack of community services to support this. However, it is an issue in terms of long-term investment in infrastructure.

02.02 Operational Policies

This clause is currently under review / not applicable, but has been included for consistent HPU clause numbering.

02.03 Planning Models

LOCATION
In order to provide easy access for ambulances, taxis or private vehicles for women in labour, a ground floor location is preferred for the Birthing Unit (and Birth Centre). Such a location would additionally facilitate access to hospital grounds and verandas for the mothers and their supporters. If this cannot be achieved, direct lift access to the Unit is recommended and access to a secure courtyard is desirable. Units should be located to avoid:

- disturbing sounds, both on-site and off-site such as ambulance sirens traffic, trains etc.;
- disturbing views such as cemeteries, mortuaries or their entries; and
- problems associated with prevailing weather conditions. It is preferable for patient accommodation to have a north-east aspect.

The functional needs of the unit however should take priority over other location needs.
The Birthing Unit and Birth Centre should ideally be located to maximise or provide quietness, outlook and outdoor access during long periods of labour for both mother and supporters. Access to outdoor areas is of particular importance for units in rural areas with high aboriginal populations who are not used to being confined indoors. However, privacy remains a priority.
Planning should consider the proximity of 24 hour and 8 hour operational zones. 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. See Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, Australasian Health Facility Guidelines (AHIA, 2010)for further information.

02.04 Functional Areas

FUNCTIONAL ZONES
Functional zones may include:

- main entry, reception, waiting;
- assessment / early pregnancy unit;
- outpatient clinics;
- day only unit;
- birthing unit;
- inpatient units / beds;
- staff offices and amenities not incorporated into individual units; and
- teaching and research.

MAIN ENTRY / RECEPTION / WAITING
Size and design will depend on the size of the unit / centre. 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 for the facility.

ASSESSMENT / EARLY PREGNANCY UNIT
The unit is for the management of pregnant women with threatened miscarriage or premature labour. Planners will need to determine the preferred location in relation to the emergency unit.
These are emergency services and the position of the unit would depend on the service model proposed as part of the planning documents. Facilities comprise bed bays or single rooms with the necessary clinical and family support facilities.

OUTPATIENT (AMBULATORY CARE) CLINICS
Maternity outpatient services encompass prenatal, antenatal and postnatal care including education, counselling and support services for mothers, partners and families to ensure preparation for, and understanding of pregnancy, birth, parenting and mother care. Newborn hearing screening may also be undertaken in this service. Increasingly, services are expanding and diversifying to include follow-up perinatal bereavement counselling.
Related clinics such as fertility services and urogynaecology are also often part of outpatient services in major centres.
Planners should determine the model of care to be adopted by the facility to determine:

- whether there is sufficient throughput to justify dedicated clinic rooms or shared rooms with a general outpatients department;
- the range of services to be provided and therefore the number of clinic rooms required; and
- the location of hospital-based outpatient facilities.

Depending on numbers, a single waiting room may create issues of patient management as there are different waiting and treatment times for different clinics and this may lead to agitation in long wait patients. It is suggested that waiting areas are designed into pods based on common treatment and waiting times - for example maternal foetal medicine, cultural, midwifery, medical and shared care. Consider the need for

separate clusters of rooms for bereavement counselling and fertility counselling. This area should be child, family, disability friendly and safe with adequate circulation space.
Facilities may also include a room for antenatal classes and the Centering Pregnancy Programme. Midwives operating a midwife-led, birth centre model will usually see their clients within the Birth Centre, at home or at an alternative venue.

DAY ONLY MATERNITY AND PERINATAL SERVICES AND FACILITIES
In addition to routine clinic attendances, it may be necessary for some antenatal women to attend hospital on a day or half-day basis for maternal and foetal 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 that may include access to a dedicated obstetric ultrasound unit depending on the proximity of the main medical imaging unit and operational policy. Facilities may be collocated with maternity outpatient clinics.

BIRTHING UNIT
The Birthing Unit consists of LDR (labour, delivery, recovery) rooms, assessment and induction rooms, staff areas and clinical support areas. The number of LDR and assessment and induction rooms will depend on the volume of deliveries expected in the facility.
Staff and clinical support functions in the Birthing Unit can be shared with other Maternity Unit zones, depending on the functional relationships able to be achieved and size of the Unit. A factor that will impact on the ability for sharing is that the Birthing Unit needs physical and acoustic separation from other parts of the Maternity Unit so as not to impinge on the wellbeing of other occupants, It is also critical that Birthing Unit staff do not need to travel too far to access supplies, linen, utilities etc, which may interfere with the birth.

INPATIENT BED MIX
Maternity inpatient units usually comprise a mix of single and two-bed rooms. The mix will be a decision for individual jurisdictions. Single bed rooms have infection control benefits and are sought after for privacy and better accommodate the growing equipment requirements. Two-bed rooms facilitate socialisation and parentcraft.
Consideration may be given to a four-bed high dependency room but usually only in a postnatal unit.
Housing of maternity patients in non-maternity units or non-maternity patients in maternity units raises issues of ongoing maternity care, infection control and infant safety and should be avoided.

ANTENATAL BEDS
Antenatal beds are used by women with high risk pregnancies. Services operating at Level 4 may have very minimal need for such beds. In Level 5/6 services, antenatal beds may be a separate unit or a module of beds collocated with postnatal beds. Larger rooms for bariatric patients will be required.
Lengths of stay will vary but some women may remain for long periods. Many of the conditions may require considerable rest and quiet and a single bedroom is the preferred option. However, women may also be ambulant and access to a lounge / dining and outdoor area for socialisation with other patients and families including young siblings should be provided.
Clinical support areas for antenatal beds may be shared with the postnatal zone, depending on the functional relationships and unit size.

POSTNATAL BEDS
Access to postnatal beds is critical due to the unpredictability of the service and to avoid exit block from the Birthing Unit when there are surges in birth numbers.
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. Postnatal beds may be clustered for general maternity care (healthy mother, healthy baby), higher dependency care for closer observation maternity care (post caesarean section, complex delivery) and a small and very discreet cluster for women who have lost their baby or have relinquished it for adoption. It is stressed that this latter category still needs ongoing maternity care, psychological care, social care and support.
Accommodation in a non-maternity unit is not the best solution.
There is a need for one or two larger postnatal bedrooms to cope with multiple births (there may be two to three sets at one time) bariatric patients, and people with disabilities e.g. wheelchair bound. Clinical support areas for postnatal beds may be shared with the antenatal zone, depending on the functional relationships and unit size.
Access to space and storage of equipment for undertaking of newborn infant hearing screening should also be considered as part of planning.

02.05 Functional Relationships

The Maternity Unit has functional relationships with the following units / services relevant to their level of service delivery:

- community maternity services;
- universal newborn health screening service;
- emergency unit;
- Birthing Centre;
- imaging - particularly obstetric ultrasound;
- anaesthetic services;
- operating rooms - for emergency and planned surgery (Levels 1 – 4 in South Australia with a centre managing 4,000 births needs a designated obstetric theatre);
- special care nursery and neonatal intensive care unit;
- ICU and HDU for sick women;
- ambulance transport bay/s for retrieval services (NSW Newborn and Paediatric Emergency Transport Service);
- helipad, where provided, for retrieval teams including the Flying Doctor Service;
- gynaecological inpatient beds;
- general hospital support services; and
- pathology and pharmacy services.

03 DESIGN

03.01 Accessibility

The Assessment Unit, Birthing 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 not be via the emergency department. The Birth Centre ideally should have its own entry with internal links to the main Birthing Unit 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 birthing area. After-hours policy may allow restricted access to partners / support persons of mothers in the in-patient 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.
Swipe card or key pass at access points should be considered as they provide a more secure, cost effective access control.

03.02 Parking

Parking and drop-off will be required for:

- ambulances, taxis, private vehicles with women in labour;
- on call obstetricians and anaesthetists;
- car parking for partners bringing women to the Birthing Unit; and
- flowers and gift deliveries.

For staff parking, refer to Part C: Section 790, Safety and Security Precautions. Parking of vehicles used by midwives providing home services will need to be considered.

03.03 Disaster Planning

Each component of the Unit will have operational plans and policies detailing the response to a range of internal and external emergency situations. During planning and design phases consider issues such as the placement of emergency alarms, the need for uninterrupted power supply (UPS) to essential clinical equipment and electronic sensor taps, services such as emergency lighting, telephones, duress alarm systems and computers and the emergency evacuation of patients, many of whom will require assistance.
Refer to Part B: Section 80 General Requirements and Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, for further information.
Particular attention is required to the means of evacuation for mothers in advanced labour, and evacuation of babies to avoid separation from their mothers.

03.04 Infection Control

GENERAL
The following aspects of planning and design contribute to the implementation of effective infection prevention and control measures and are relevant within the context of this HPU:

- hand hygiene facilities;
- isolation rooms (if applicable);
- linen handling;
- separation of ‘clean’ and ‘dirty’ work flows;
- storage;
- waste management; and
- surface finishes.

Refer to Part D: Infection Prevention and Control and individual jurisdiction policies and guidelines.

ISOLATION ROOMS
It is recommended that there be at least one negative pressure Birthing Room with Anteroom available in the inpatient units.

03.05 Environmental Considerations

ACOUSTICS
Acoustic treatment is essential in the Birthing Rooms to allow the mother to vocalise as desired during labour without worrying about disturbing others.
Crying babies, especially at night, can be a major source of distress to others, particularly mothers recovering from surgery or other conditions e.g. pre-eclampsia, for whom noise may be detrimental to their condition.
One of the prime considerations in the Nursery is the amount of noise created by crying babies, monitors, suction pumps, ventilators, etc. Methods of sound dampening should be carefully considered, but should not interfere with observation and ease of access between the Nursery and staff / support areas.
Refer to Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, for further information.

NATURAL LIGHT
Natural light contributes to a sense of wellbeing for all building occupants including patients, staff and other users. A limited number of research studies suggest a link between greater levels of natural light with improved clinical outcomes.
Natural light is required to all bedrooms in accordance with Building Code of Australia (BCA) (ABCB, 2015).
Higher levels of natural light may help people better orient themselves in the building thus enhancing wayfinding. Glare should be minimised.
Greater use of natural light may also reduce energy usage in terms of reducing the need for artificial lighting.
For these reasons, the use of natural light should be maximised throughout the unit.

PRIVACY
Ensure that doors to birthing rooms when opened do not expose the labouring woman to view by others outside the room.

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.
Some colours, particularly the bold primaries and green should be avoided in areas where clinical observation occurs such as bedrooms and treatment areas. Such colours may prevent the accurate assessment of skin tones e.g. yellow / jaundice, blue / cyanosis, red / flushing.

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.

SIGNAGE
The orientation of people to and within healthcare facilities, and even safety and security issues are greatly assisted or hampered by the quality and location of signage which may be directional, used as a means of identification and/or statutory.
All signage should be easily understood by staff and the general public whether patients or visitors, and where necessary and appropriate, languages other than English should also be used.
Any signposting, or other initiatives put in place, should be considered from the perspective of out-of-hours use. Certain access points may be locked out of office hours or after visiting hours. Directions indicated through signposting should, therefore, be evaluated in this context.
Refer to Part C: Section 750, Signage and TS2: Wayfinding for Healthcare Facilities, Issue 5th Ed (NSW Health, 2008). In particular, signage for access to the Assessment Unit, Birthing Unit and Birth Centre should be easily identified to avoid confusion.

03.06 Space Standards and Components

HUMAN ENGINEERING
Human engineering covers those aspects of design that permit effective, appropriate, safe and dignified use by all people, including those with disabilities. For details refer to Part C: Section 730, Human Engineering. As the requirements of occupational health and safety (OHS) and antidiscrimination legislation will apply, this section should be read in conjunction with Part C: Section 790, Safety and Security Precautions in addition to relevant OHS legislation.

ERGONOMICS
Maternity Units should be designed and built in such a way that patients, staff, visitors and maintenance personnel are not exposed to avoidable risks of injury. Badly designed recurring elements such as height, depth and design of workstations and counters, shelving and the layout of critical rooms have a great impact on the occupational health and safety of staff as well as the welfare of patients. Inherent in this is the capacity to safely treat bariatric patients. Refer to the section on Access and Mobility in Part C: Section 730, Human Engineering.

ACCESS AND MOBILITY
Where necessary, design should comply with AS/NZS 1428:2010 Design for Access and Mobility (Set) (Standards Australia, 2010).

BUILDING ELEMENTS
Building elements include walls, floors, ceilings, doors, windows and corridors and are addressed in detail in the section on Building Elements in Part C: Section 710, Space Standards and Dimensions.

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.

03.07 Safety and Security

RISK / HAZARD MANAGEMENT
Consideration of safety and security risks should begin during the planning and design phase of a healthcare facility and should continue to be considered during the construction, use and post occupancy stages.
By adopting a risk management approach, many safety and security related hazards can be eliminated or minimised at the planning stage before work even begins, reducing the likelihood of adverse incidents occurring. Occupational Health and Safety (OHS) or similar legislation requires planners and designers to identify, assess and control risks and to do this in consultation with stakeholders, including staff.
Refer to AS/NZS ISO 31000:2009 Risk Management - Principles and Guidelines (Standards Australia, 2009) and Part C: Section 790, Safety and Security Precautions, Australasian Health Facility Guidelines (AHIA, 2015).

SAFETY
Facility planners and designers should enhance safety through choices regarding the design, methods of construction, materials used, and the choice of fittings, fixtures and equipment.

SECURITY
Facility planners and designers should enhance security by incorporating the principles of territorial reinforcement, surveillance, space management and access control into design decisions.
Minimise entry and exit doors to all areas with newborn babies to minimise the risk of illegal removal of babies. All access to and egress from the unit should be controlled. CCTV monitoring of Unit entry and exit doorways and hallways should be considered. The use of reed switches, electric locking and video intercom on external doors and entries should be considered. Swipe card readers may be required to both sides of internal doors, to allow access for authorized staff.
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 nursery 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.).

INFANT SAFETY AND SECURITY
Both mothers and babies require identification bracelets / bands. Keeping mothers and babies together unless clinically indicated to the contrary enhances the babies' safety.
CCTV, access control and infant tagging should be considered (Cesario 2003). Consider implementation of a system that provides baby with an electronic tag around baby's ankle and alerts staff / security when the unit boundary is breached via sensor panels located at the Unit / hospital exits. It should be noted however that infant tagging is costly and has proved problematic where it has been implemented because neonates lose weight in the first days of life. The tag bracelets therefore can become too large and may slip off easily.
There is a requirement for a lock down capability of the whole unit when there is a known security risk e.g. that a baby might be taken.

03.08 Finishes

GENERAL
Finishes in this context refers to walls, floors, windows and ceilings. Refer to Part C: Section 710, Space Standards and Dimensions for further details.

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, bed head walls, treatment areas, equipment and linen trolley bays. Refer to Part C: Section 710, Space Standards and Dimensions.

FLOOR FINISHES
The selection of floor finishes should be appropriate to the function of the space and take into account manual handling issues including the impact of the flooring on push / pull forces for wheeled equipment. Consider acoustic performance, slip resistance, consequences of patient falls, infection control, movement of beds and trolleys, maintenance and cleaning protocols. The flooring selected should be adequate to avoid the potential for slips, trips and falls to occur, including as a result of joints between flooring. Refer to:

- Part D: Infection Prevention and Control;
- TS7 - Floor Coverings in Healthcare Buildings, Issue V1.1 (NSW Health, 2009); and
- Part C: Section 710, Space Standards and Dimensions.

CEILING FINISHES
Ceiling finishes should be selected with regard to appearance, cleaning, infection control, acoustics and access to services. Refer to Part C: Section 710, Space Standards and Dimensions.

03.09 Fixtures, Fittings & Equipment

DEFINITION
The Room Data and Room Layout Sheets in the Australasian Health Facility Guidelines 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.

Refer to Part C: Section 710, Space Standards and Dimensions and to the Standard Components - Room Data Sheets (RDS) and Room Layout Sheets (RLS) for further detailed information.
Also refer to Part F: Section 680 Furniture Fittings and Equipment regarding fixtures, fittings and equipment.

BIRTHING ROOM BATHS

Baths that are an integral feature of the Birthing Room should be peninsula-style, i.e. not corner baths. Corner baths have been identified as an OHS risk. Multi-side access deep baths with support bars are required even if it affects room size. This is important to aid lifting when necessary and for observation. This may raise other management issues and the location and space requirement needs careful planning.
Design of taps and outflows are critical. Warm water is a requirement in all healthcare facilities and therefore taps should be large enough to fill the bath quickly before the water cools to an uncomfortable temperature and outlets should be large enough to ensure rapid emptying should the need arise.
Spa jets should not be included as spa outlets are unable to be cleaned adequately from an infection control perspective and ceiling hoists or lifters should be considered.

03.10 Building Service Requirements

GENERAL

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

- Part E: Building Services and Environmental Design; and
- TS11 - Engineering Services and Sustainable Development Guidelines (NSW Health, 2013).

AIR HANDLING SYSTEMS

All components of the Unit should be fully air-conditioned.
Each Birthing Room should have individual air-conditioning systems. If the thermostats are located inside the Birthing Room, the controls should be located out of the reach of children and under the control of staff only. The rooms need to be able to quickly obtain a temperature range of 25-27°C when the baby is born. The Nursery also requires similar temperature control.
Refer to Part D: Infection Prevention and Control and HB 260:2003 Hospital Acquired Infections - Engineering Down the Risk (Standards Australia, 2003).

ELECTRICAL SERVICES

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

INFORMATION TECHNOLOGY AND COMMUNICATIONS

Systems may include:

- wireless technology;
- radiofrequency identification (RFID) for access control, locks etc.;
- duress alarm systems - fixed and personal as required;
- nurse / emergency call systems;
- voice / data (telephone and computers);
- videoconferencing capacity / telemedicine;
- electronic medical records;
- clinical point of care;;
- picture archiving communication system (PACS);
- patient administration systems (PAS);
- radiology information systems (RIS);
- 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 and X-rays / records;
- patient information screen integrated with menu ordering, nurse call and other modalities;
- server and communications rooms;
- e-learning and simulation;
- e-medication management and e storage systems e.g. automated dispensing systems;
- server rooms; and
- communication rooms / closets.

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.

HYDRAULIC SERVICES
Warm water systems will be required.

LIGHTING
Colour-corrected dimmable lighting is essential in all patient areas where high dependency care is provided, i.e. birthing / assessment rooms and birthing room en suites and bathrooms, all nurseries and baby bathing / examination / resuscitation areas.

MEDICAL GASES
Each bed will require oxygen, suction and medical air. Service panels, mother and newborn, in Birthing Rooms should be enclosed. For anaesthesia requirements in birthing rooms refer to Recommendations of Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations - Interim Review 2008 (Australian and New Zealand College of Anaesthetists, 2009).

04 COMPONENTS OF THE UNIT

04.01 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;
- *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

04.02 Non-Standard Components

Non-standard components are unit-specific and provided in accordance with specific operational policies and service demand. The following non-standard components are described below:

- Assessment Room and Assessment / Induction Room;
- Bay – Neonatal Resuscitation;
- Bay – New Weighing / Assessment;
- Newborn Bathing Room / Examination / Treatment Room;
- General Nursery; and
- Breastfeeding Room.

ASSESSMENT ROOM AND ASSESSMENT / INDUCTION ROOM
Description and Function
An Assessment Room is located in the Assessment / Early Pregnancy Unit. It is used to conduct patient examinations and monitor foetal activity, heart beat etc.
An Assessment / Induction Room is located in the Birthing Unit and is used to conduct patient examinations and monitor foetal heart beat etc. at the very early stages of labour. It can also be used for the application 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 / Induction room should be in close proximity to Birthing Rooms for ease of transfer when labour is established.

Considerations
Assessment Rooms in the Assessment / Early Pregnancy Unit may be enclosed rooms or bays, however in the Birthing Unit, these rooms should be enclosed.

BAY – NEONATAL RESUSCITATION
Description and Function
This area is an emergency treatment bay in the Birthing Unit for babies who are compromised and need emergency intervention / support e.g. oxygen, resuscitation, stabilisation prior to transfer to Neonatal Intensive Care Unit (NICU).

Location and Relationships
This area should be located centrally within the Birthing 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.

BAY – NEWBORN WEIGHING / ASSESSMENT
Description and Function
A small bench area in the Birthing Unit for weighing new born babies and completing associated paperwork. This area is optional as scales could be located within each birthing room as an alternative.

Location and Relationships
This area should be located centrally in the Birthing Unit, able to be accessed from all Birthing Rooms.

Considerations
It is preferable for baby to be removed from the Birthing Room only in the company of a parent / support person.

NEWBORN BATHING / EXAMINATION / TREATMENT ROOM
Description and Function
A room for infant examination, administration of vaccines and hearing screening, and demonstration of baby bathing techniques as part of parentcraft education. Size will depend on operational policy regarding demonstration and whether bathing occurs in mothers' bedrooms. It is recommended that purpose-built baby baths and sinks are used for OHS reasons rather than portable baths or bassinets.

Location and Relationships
The room may be a separate room in the Postnatal zone adjacent to an optional General Nursery, or the two spaces can be combined to include the General Nursery function.

Considerations
Storage for baby scales. Attention to height of benches and mounting of baby baths.

GENERAL NURSERY
Description and Function
A room where babies can be cared for by maternity unit staff for a short period. This room is optional. In some jurisdictions the practice of caring for babies in a nursery is not supported; rooming in is encouraged.

Location and Relationships
This room should be located in the Postnatal zone and be oversighted by the staff station. It is preferable for it to be adjacent to or incorporated in the Bathing / Examination / Treatment room.

Considerations
Inclusion of a General Nursery requires consideration to be given to staffing requirements to ensure appropriate supervision of babies in the Nursery at all times. Infection control issues also need to be considered.

BREASTFEEDING ROOM
Description and Function
A room for demonstrations, breastfeeding or using breast pumps for expressing milk. In small units, the room may also be used to prepare and store formula / breast milk substitutes in line with the Baby Friendly Health Initiative.
This room is optional if other space is available for demonstrations (group or individual) e.g. meeting room and a fridge / freezer is available in the formula room for storage of breast milk.

Location and Relationships
The Breastfeeding Room should be located with convenient access to the Nursery or to the Inpatient Unit.

Considerations
The Breastfeeding Room will require the following:

- bench with an inset sink;
- hand basin (Type B) for mothers and staff;
- comfortable chairs suitable for breastfeeding;
- lockable refrigerator / freezer (if required);
- storage for pump and attachments;
- general power outlets for use of a breast pump;
- access to educational material either within the room or conveniently located nearby; and
- visual and acoustic privacy.

AX APPENDICES

AX.01 Schedule of Accommodation

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

The 'Room/ Space' column describes each room or space within the Unit. Some rooms are identified as 'Standard Components' (SC) or as having a corresponding room which can be derived from a SC. These rooms are described as 'Standard Components –Derived' (SC-D). The 'SD/SD-C' column identifies these rooms and relevant room codes and names are provided.

All other rooms are non-standard and will need to be briefed using relevant functional and operational information provided in 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

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
RECL-10	Reception / Clerical, 10m2	Yes	1 x 10	1 x 12	
WAIT-10	Waiting, 10m2	Yes	1 x 9	1 x 12	
INTF	Interview Room	Yes	1 x 9	1 x 9	
BVM-3	Bay - Vending Machine	Yes	1 x 2	1 x 2	
BWD-1	Bay - Water Dispenser	Yes	1 x 1	1 x 1	
WCPU-3	Toilet - Public, 3m2	Yes	2 x 3	2 x 3	
WCAC	Toilet - Accessible, 6m2	Yes	1 x 6	1 x 6	
	Discounted Circulation		32%	32%	

ASSESSMENT / EARLY PREGNANCY UNIT

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
1BR-H-12	1 Bed Room, 12m2	Yes	4 x 12	8 x 12	Rooms or bed bays.
ENS-ST	Ensuite - Standard, 5m2	Yes	4 x 5	8 x 5	Reduce if only bed bays planned.
INTF	Interview Room	Yes	1 x 9	2 x 9	
LNPF-10	Lounge - Patient / Family, 10m2	Yes	1 x 12	1 x 20	
SSTN-10	Staff Station, 10m2	Yes	1 x 10	1 x 12	
CLUR-12	Clean Utility / Medication Room, 12m2	Yes	1 x 10	1 x 12	Includes medication storage.
DTUR-10	Dirty Utility, 10m2	Yes	1 x 10	1 x 12	Initial Cleaning of vaginal probes – to be cleaned in scope cleaners.
STEQ-14	Store - Equipment	Yes	1 x 4	1 x 6	Space for CTG, Ultra sound machines.
	Discounted Circulation		32%	32%	

BIRTHING UNIT

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
BHWS-B	Bay – Handwashing, Type B	Yes	1 x 1	1 x 1	At Unit Entry with PPE.
	Assessment / Induction Room		2 x 15	4 x 15	
BIRM	Birthing Room - LDR	Yes	4 x 30	7 x 30	Number determined by number of births. Capacity for multiple births, peninsular bath.
	Birthing Room - Isolation			1 x 30	Negative pressure.
ANRM	Anteroom	Yes		1 x 6	For isolation (negative pressure) room.
ENS-BR-A	Ensuite – Birthing Room, 10m2	Yes	4 x 10	8 x 10	Include double shower.
STGN-8	Store – General, 8m2	Yes	2 x 8	4 x 8	Shared space between birthing rooms for CTG, cribs with discreet access from birthing and entry corridor.
BATH	Bathroom	Yes	1 x 15	1 x 15	Configured specifically for birthing. Optional - Birthing Pool. Replaces ensuite.
	Bay - Neonatal Resuscitation		2 x 12	2 x 12	Neonates - All medical gases to be provided.
	Bay – Newborn Weighing / Assessment		1 x 1 (o)	1 x 1 (o)	May be performed in Birthing Room.
SSTN-14	Staff Station, 14m2	Yes	1 x 12	1 x 14	
OFF-CLW	Office - Clinical Workroom	Yes	1 x 15	1 x 20	Provide hot desks for visiting staff e.g. community midwives, medical staff, allied health.
OFF-S9	Office - Single Person, 9m2	Yes	1 x 9	1 x 9	Unit Manager.
STFS-10	Store - Files, 10m2	Yes	1 x 8	1 x 10	
CLUR-12	Clean Utility / Medication Room, 12m2	Yes	1 x 12	1 x 14	Includes pharmacy products.
DTUR-10	Dirty Utility, 10m2	Yes	1 x 10	1 x 12	Include locked fridge / freezer for placenta storage and initial cleaning of scopes etc.
DISP-8	Disposal Room, 8m2	Yes	1 x 8	1 x 10	May be shared with Ante/ Postnatal.
BMEQ-4	Bay - Mobile Equipment, 4m2	Yes	1 x 4	2 x 4	
BLIN	Bay - Linen	Yes	1 x 2	2 x 2	
BBW	Bay - Blanket / Fluid Warmer	Yes	1 x 1	2 x 1	
BRES	Bay - Resuscitation Trolley	Yes	1 x 1.5	1 x 1.5	For adults.
	Store – Drugs		1 x 5(o)	1 x 5(o)	May be included in sterile stock store with appropriate security or part of clean utility.
STSS-12	Store - Sterile Stock, 12m2	Yes	1 x 12	1 x 16	
STEQ-14	Store - Equipment, 14m2	Yes	1 x 14	1 x 20	
STGN-9	Store – General, 9m2	Yes	1 x 9	1 x 9	
BWC	Bay – Wheelchair Park	Yes	1 x 4	1 x 4	
BBEV-OP	Bay – Beverage, Enclosed	Yes	1 x 5	1 x 5	
CLRM	Cleaner's Room, 5m2	Yes	1 x 5	1 x 5	May be shared with Ante/ Postnatal.
	Lounge / Beverage - Visitors		1 x 12	1 x 16	
MEET-L-20	Meeting Room, 20m2	Yes	1 x 15	1 x 20	Meetings and education.
SRM-15	Staff Room, 15m2	Yes	1 x 12	1 x 16	May be shared with Ante / Postnatal.
CHST-10	Change - Staff (Male / Female), 10m2	Yes	2 x 10	2 x 10	Shower, toilet, lockers. May be shared with Ante / Postnatal.
	Discounted Circulation		35%	35%	

INPATIENT UNIT - ANTENATAL

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
BHWS-B	Bay – Handwashing, Type B	Yes	1 x 1	1 x 1	At Unit Entry with PPE.
1BR-ST	1 Bed Room, 15m2	Yes	15	8 x 15	Level 3/4 beds may be included in the Postnatal Ward. No.s will be dependent on service requirements.
1BR-SP-A	1 Bed Room - Special, 18m2	Yes	18	2 x 18	Level 3/4 beds may be included in the Postnatal Ward. No.s will be dependent on service requirements.
2BR-ST	2 Bed Room, 25m2	Yes	28 (o)	varies x 28(o)	Optional.
ENS-ST	Ensuite - Standard, 5m2	Yes	5	8 x 5	Depends on number of 1 bed rooms (standard).
ENS-SP	Ensuite - Special, 6m2	Yes	6	2 x 6	Depends on number of 1 bed rooms (special).
LNPT-10	Lounge - Patient / Family	Yes	1 x 12	1 x 15	May be used for dining.
	Discounted Circulation		35%	35%	

Notes:

- Bed numbers are indicative only and will need to be modified on a project-by-project basis.
- Level 3/4 beds may be included in the Postnatal Ward.

INPATIENT UNIT - POSTNATAL

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
BHWS-B	Bay – Handwashing, Type B	Yes	1 x 1	1 x 1	At Unit Entry with PPE.
1BR-ST	1 Bed Room, 15m2	Yes	15	17 x 15	May be used as Class S/Type 4 Isolation Room. Level 3/4 beds may be shared with the Antenatal Ward.
1BR-IS-N	1 Bed Room - Isolation - Negative Pressure, 15m2	Yes	15	1 x 15	Negative pressure. Level 3/4 requirements vary dependeing on service needs.
ANRM	Anteroom	Yes	6	1 x 6	For isolation bed room.
1BR-SP-A	1 Bed Room - Special, 18m2	Yes	18	2 x 18	Bariatric, double bed, multiple births, wheelchair may be accommodated in these rooms. Level 3/4 requirements vary dependeing on service needs.
2BR-ST	2 Bed Room, 25m2	Yes	28(o)	28(o)	
ENS-ST	Ensuite - Standard, 5m2	Yes	5	17 x 5	Depends on number of 1 bed rooms (standard).
ENS-SP	Ensuite - Special, 6m2	Yes	6	3 x 6	Depends on number of 1 bed rooms (special).
	Newborn Bathing / Examination / Treatment Room		1 x 12	1 x 16	Bathing/examination; phototherapy. Include neonatal resuscitation trolley. Adjacent to General Nursery.
	General Nursery		1 x 12(o)	1 x 16(o)	Directly adjacent to, or incorporated into, the Newborn Bathing / Examination / Treatment Room - optional.
BBW	Bay - Blanket / Fluid Warmer	Yes	1 x 1(o)	1 x 1(o)	Optional.
FEED	Feeding Room	Yes	1 x 9	1 x 12	Adjacent to nursery.
MEET-L-20	Meeting Room , 20	Yes	1 x 20	1 x 30	Patient education classes. Need spacing to accommodate cots. May share with Antenatal.
FORM	Formula Room	Yes	1 x 8	1 x 8	Unless located in NICU or Paediatric Unit. Additional 1 m2 for freezer would be included.
OFF-S9	Office - Single Person, 9m2	Yes	1 x 9	1 x 9	For lactation Consultant.
LNPF-20	Lounge - Patient / Family	Yes	1 x 12	1 x 15	
	Discounted Circulation		35%	35%	

Bed numbers are indicative only and will need to be modified on a project-by-project basis.

CLINICAL SUPPORT – ANTENATAL AND POSTNATAL INPATIENT UNITS

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
SSTN-10	Staff Station, 10m2	Yes	1 x 12	1 x 12	May include space for 2 bassinets - increase by 3m2. May also have additional decentralised staff stations.
OFF-CLW	Office – Clinical Workroom	Yes	1 x 15(o)	1 x 15(o)	Optional.
BHWS-B	Bay – Handwashing, Type B	Yes	1 x 1	2 x 1	Handbasins included in every bedroom.
BFLW-OP	Bay - Flowers	Yes	1 x 2(o)	1 x 2(o)	Optional – included in dirty utility.
STEQ-14	Store - Equipment, 14m2	Yes	1 x 10	1 x 12	Spare bassinets, transport humidicrib.
STGN-9	Store – General, 9m2		1 x 6(o)	1 x 9(o)	Optional - due to jurisdictional protocols and guidelines. Rental baby capsules.
STGN-8	Store – General, 8m2	Yes	1 x 8	1 x 9	Bulky items etc.
PTRY	Pantry	Yes	1 x 8	1 x 8	
DTUR-10	Dirty Utility, 10m2	Yes	1 x 10	1 x 12	
CLUR-12	Clean Utility / Medication Room, 12m2	Yes	1 x 12	1 x 14	
BLIN	Bay – Linen	Yes	1 x 2	2 x 2	
BRES	Bay - Resuscitation	Yes	1 x 1.5	1 x 1.5	For adults.
CLRM-5	Cleaner's Room, 5m2	Yes	1 x 5	1 x 5	May be shared with Birthing Unit.
DISP-8 / DISP-10	Disposal Room, 8m2	Yes	1 x 8	1 x 10	May be shared with Birthing Unit.
	Discounted Circulation		32%	32%	

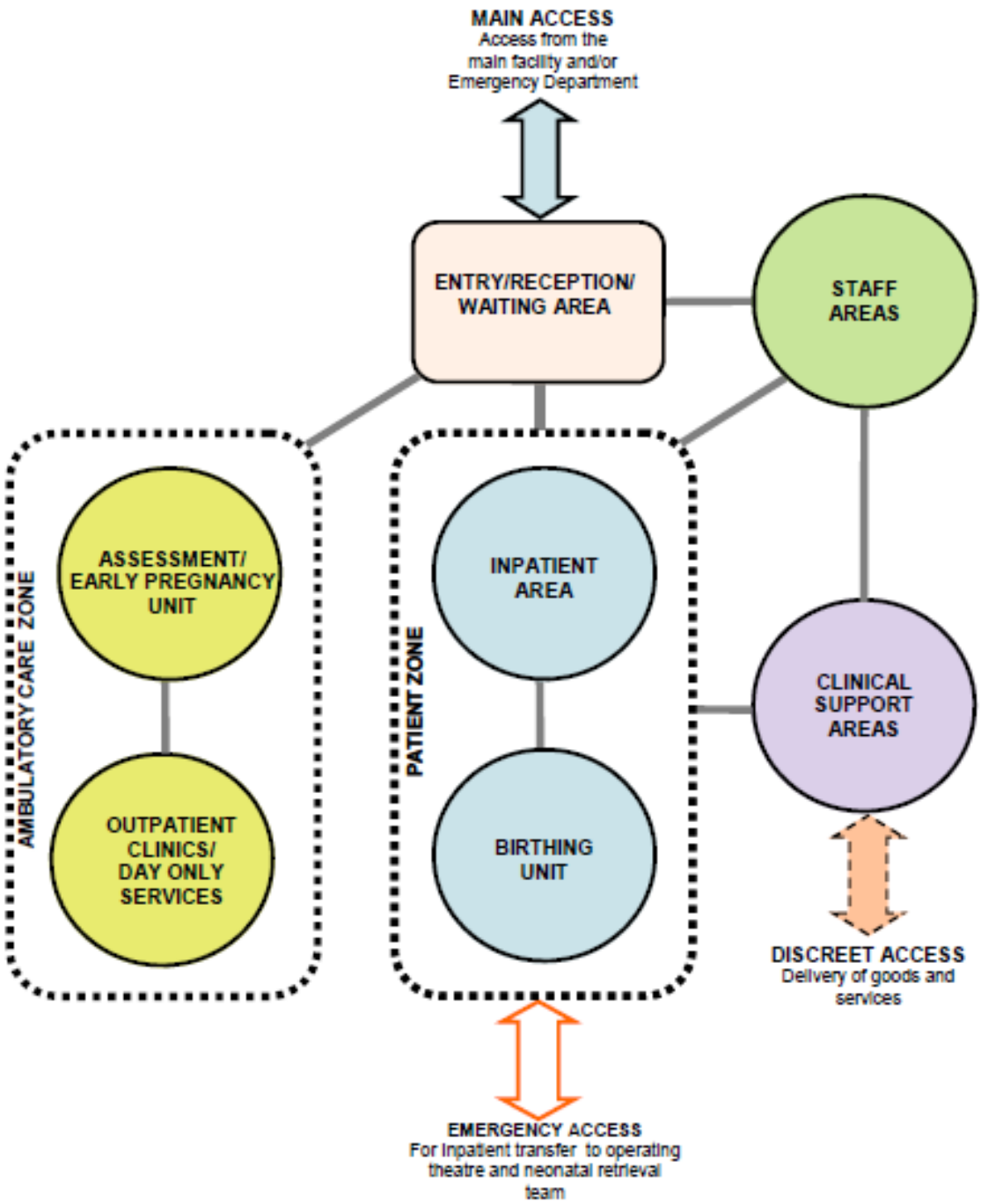
These facilities may be shared between Antenatal and Postnatal Units, decentralised to each Inpatient Area, or a combination of both, depending on Unit bed numbers and functional relationships. Some rooms may also be shared with the Birthing Unit, depending on Unit size and functional relationships.

STAFF AREAS AND AMENITIES – ANTENATAL AND POSTNATAL INPATIENT UNITS

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2 Levels 3/4	Qty x m2 Levels 5/6	Remarks
MEET-L-20	Meeting Room, 20m2	Yes	1 x 15	1 x 20	Adjust size to suit establishment. Consider location between postnatal and antenatal.
OFF-S9	Office - Single Person, 9m2	Yes	1 x 9	1 x 9	For Unit Manager.
OFF-2P	Office - 2 Person Shared, 12m2	Yes	1 x 12	1 x 12	Clinical Nurse Consultant, nurse educator etc.
OFF-S9	Office - Single Person, 9m2	Yes		1 x 9	For Reproductive Loss Co-ordinator.
	Office - Workstation		4.4 or 5.5	4.4 or 5.5	for midwives. As per staff establishment.
WCST	Toilet - Staff, 3m2	Yes	1 x 3(o)	2 x 3(o)	Optional – may be part of staff change rooms.
SRM-15	Staff Room, 15m2	Yes	1 x 12	1 x 15	May be shared with Birthing Unit.
CHST-10	Change - Staff (Male / Female), 10m2	Yes	2 x 10	2 x 10	Shower, toilet, lockers. May be shared with Birthing Unit.
STPS-8	Store – Photocopy / Stationery, 8m2	Yes	1 x 8	1 x 8	May be shared with Birthing Unit.
	Discounted Circulation		32%	32%	

These facilities may be shared between Antenatal and Postnatal Units, decentralised to each Inpatient Unit, or a combination of both, depending on Unit bed numbers and functional relationships. Some rooms may also be shared with the Birthing Unit, depending on Unit size and functional relationships. Reference should be made to the relevant jurisdiction's office accommodation policies.

AX.02 Functional Relationships / Diagrams



AX.03 Checklists

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

AX.04 References

- ABCB, 2015, Building Code of Australia (BCA) (ABCB, 2015), Building Code of Australia (BCA), Australian Building Codes Board, Canberra ACT
- AHIA, 2010, Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, Part E: Building Services and Environmental Design, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW http://healthfacilityguidelines.com.au/guidelines.aspx
- AHIA, 2010, AusHFG Part B: Section 90, Standard Components, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, Part B: Section 80 General Requirements, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW http://healthfacilityguidelines.com.au/AusHFG_Documents/Guidelines/%5bB-0080%5d%20General%20Requirements.pdf
- AHIA, 2015, Part D: Infection Prevention and Control, Australasian Health Facility Guidelines (AHIA, 2015), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW http://healthfacilityguidelines.com.au/AusHFG_Documents/Guidelines/Part%20D%20-%20Infection%20Prevention%20and%20Control%20(Complete).pdf
- AHIA, 2010, Part C: Section 730, Human Engineering, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW http://healthfacilityguidelines.com.au/AusHFG_Documents/Guidelines/%5bC-0730%5d%20Human%20Engineering.pdf
- AHIA, 2010, Part C: Section 710, Space Standards and Dimensions, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW http://healthfacilityguidelines.com.au/AusHFG_Documents/Guidelines/%5bC-0710%5d%20Space%20Standards%20and%20Dimensions.pdf
- AHIA, 2015, Part C: Section 790, Safety and Security Precautions, Australasian Health Facility Guidelines (AHIA, 2015), Australasian Health Facility Guidelines, AHIA, Sydney, NSW
- AHIA, 2010, AusHFG Part C: Section 750, Signage, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, Part F: Section 680 Furniture Fittings and Equipment, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW http://healthfacilityguidelines.com.au/AusHFG_Documents/Guidelines/%5bF-0680%5d%20Furniture%20Fittings%20and%20Equipment.pdf
- AHIA, 2014, Part B: HPU 390 Intensive Care - Neonatal Special Care Nursery, Australasian Health Facility Guidelines (AHIA, 2014), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2015, Standard Components - Room Data Sheets (RDS) and Room Layout Sheets (RLS), Australasian Health Facility Guidelines (AHIA, 2015), Australasian Health Facility Guidelines, AHIA, North Sydney, NSW http://healthfacilityguidelines.com.au/standard_components_ak.aspx
- AHIA, 2010, Part B: HPU520 Operating Unit, Australasian Health Facility Guidelines (AHIA, 2010), Australasian Health Facility Guidelines, AHIA, Sydney, NSW
- Australian and New Zealand College of Anaesthetists, 2009, Recommendations of Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations - Interim Review 2008 (Australian and New Zealand College of Anaesthetists, 2009), Australian and New Zealand College of Anaesthetists, Sydney, NSW
- Australian Doula College, 2015, Australian Doula College (website) (Australian Doula College, 2015), Australian Doula College, Kensington, NSW
- Australian Government, 2013, Disability Discrimination Act 1992, Act No. 135 of 1992 as amended (Australian Government, 2013), Disability Discrimination Act 1992, Commonwealth Government of Australia, Canberra, ACT http://www.comlaw.gov.au/Details/C2013C00022
- Boules, N, 2007, Cultural Birthing Practices and Experiences (Boules, N, 2007), Baulkham Hills Holroyd Parramatta, Migrant Resource Centre, Sydney, NSW

- Boxall, A and Russell, L, 2009, A Reform Proposal for Maternity Services in Australia (Boxall, A and Russell, L, 2009), Menzies Centre for Health Policy, The Australian National University and The University of Sydney, Sydney, NSW http://ses.library.usyd.edu.au/bitstream/2123/9209/1/lrmaternityreform.pdf
- Centering Healthcare Institute, 2015, Centering Care Model Overview, Website (Centering Healthcare Institute, 2015), Website, Centering Healthcare Institute, Boston, MA
- Dani C1, Grella PV, Lazzarin L, Rubaltelli FF, 1997, Antenatal Ambroxol Treatment does not Prevent the Respiratory Distress Syndrome in Premature Infants, European Journal of Pediatrics, Vol 156, Issue 5, pp392-392 (Dani C1, Grella PV, Lazzarin L, Rubaltelli FF, 1997), European Journal of Pediatrics, vol. 156, no. 5, pp. 392 - 392, Belgian Pediatric Association, Brussels.
- Department of Health and Ageing, 2009, Improving Maternity Services in Australia, Report of the Maternity Services Review (Department of Health and Ageing, 2009), Commonwealth of Australia, Barton ACT
- Disability, Pregnancy & Parenthood, 2008, Good Practice: Meeting Cultural Needs, Disability, Pregnancy & Parenthood Journal, Vol 64 (Disability, Pregnancy & Parenthood, 2008), Disability, Pregnancy & Parenthood Journal, vol. 64, Disability, Pregnancy & Parenthood, London http://www.dppi.org.uk/journal/64/goodpractice2.php
- Hodnett, E. D., Stremler, R., Weston, J. A. and McKeever, P, 2008, Re-Conceptualizing the Hospital Labor Room: The PLACE (Pregnant and Laboring in an Ambient Clinical Environment) Pilot Trial, Birth, Vol 36, Issue 2, pp159-166 (Hodnett, E. D., Stremler, R., Weston, J. A. and McKeever, P, 2008), Birth, vol. 36, no. 2, pp. 159 - 166, Wiley, Toronto, Ontario
- Homer, Caroline and Caplice, Shea, 2009, Evaluation of the Publicly-funded Homebirth Program in South East Sydney Illawarra Area Health Service (Homer, Caroline and Caplice, Shea, 2009), St George Hospital, Homebirth Steering Committee, Sydney, NSW https://www.uts.edu.au/sites/default/files/stgeorge-homebirth.pdf
- Homer, Caroline S.E. et al, 2012, 'It's More than just having a Baby' Women's Experiences of a Maternity Service for Australian Aboriginal and Torres Strait Islander Families, Midwifery, Vol 28, Issue 4, pp449-455 (Homer, Caroline S.E. et al, 2012), Midwifery, vol. 28, no. 4, pp. 449 - 455, Elsevier Ltd, Melbourne , VIC
- Kathleen Fahy, Jenny Parratt, Maralyn Foureur, Carolyn Hastie, 2006, Birth Territory: A Theory for Midwifery Practice, Women and Birth, Vol 19, Issue 2, pp45-50 (Kathleen Fahy, Jenny Parratt, Maralyn Foureur, Carolyn Hastie, 2006), Women and Birth, vol. 19, no. 2, pp. 45 - 50, Australian College of Midwives, Canberra, ACT
- NSW Health, 2013, TS11 - Engineering Services and Sustainable Development Guidelines (NSW Health, 2013), Technical Series TS11 - Engineering Services and Sustainable Development Guidelines, NSW Government, North Sydney, NSW http://www0.health.nsw.gov.au/policies/gl/2008/pdf/GL2008_002.pdf
- - NSW Health, 2009, TS7 - Floor Coverings in Healthcare Buildings, Issue V1.1 (NSW Health, 2009), no. V1.1, NSW Government, North Sydney, NSW
- - NSW Health, 2008, TS2: Wayfinding for Healthcare Facilities, Issue 5th Ed (NSW Health, 2008), no. 5th Ed, NSW Government, Sydney, NSW.
- - RANZCOG, 2015, Categorisation of Urgency for Caesarean Section (RANZCOG, 2015), The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, Melbourne, Vic. https://www.ranzcog.edu.au/doc/categorisation-of-urgency-for-cs.html
- - Standards Australia, 2009, AS/NZS ISO 31000:2009 Risk Management - Principles and Guidelines (Standards Australia, 2009), Standards Australia, Sydney, NSW
- - Standards Australia, 2003, HB 260:2003 Hospital Acquired Infections - Engineering Down the Risk (Standards Australia, 2003), Standards Australia, Sydney, Australia
- Standards Australia, 2010, AS/NZS 1428:2010 Design for Access and Mobility (Set) (Standards Australia, 2010), AS/NZS 1428:2010 Design for Access and Mobility (Set), Standards Australia, Sydney, Australia. http://infostore.saiglobal.com/EMEA/Details.aspx?ProductID=1407487
- Thomas, N, 2004, The Reproductive Rights of Women with Disabilities (Thomas, N, 2004), Women with Disabilities Australia (WWDA), Lenah Valley, TAS
- Yelland et al, 2009, A National Approach to Perinatal Mental Health in Australia: Exercising Caution in the Roll-out of a Public Health Initiative, Medical Journal of Australia (Yelland et al, 2009), Medical Journal of Australia, Medical Journal of Australia, Sydney, NSW https://www.mja.com.au/system/files/issues/191_05_070909/yel10486_fm.pdf

AX.05 Further Reading

General Policies
Policies that occur in most HPUs are presented in a separate document. The resources listed below are specific to maternity and related services.

Maternity Services / Jurisdiction Reports

- Boxall, A-M and Russell, LM 2009, A reform proposal for maternity services in Australia. January 2009, Menzies Centre for Health Policy, The Australian National University and The University of Sydney;
- Department of Health and Ageing 2009, Improving Maternity Services in Australia: The Report of the Maternity Services Review, Commonwealth of Australia;
- DHS Victoria 2004, Future directions for Victoria's maternity services, DHS Victoria;
- Hirst, C 2005, Rebirthing: Report of the review of maternity services in Queensland, QLD Health;
- NSW Health 2000, The NSW framework for maternity services, NSW Health;
- QLD Health 2006, Government response to: Re-Birthing: Report of the review of maternity services in Queensland, QLD Health;
- SA Health 2009, Standards for maternal and neonatal services in South Australia 2009, SA Health;
- Tasmania. Refer to www.bubhub.com.au/serviceshospitalstas.php
- WA Health 2007a, Models of Maternity Care - A Review of the Evidence, WA Health; and
- WA Health 2007b, Improving maternity services: Working together across Western Australia: A policy framework, Health Policy and Clinical Reform, WA Health.

College Statements

- Australian and New Zealand College of Anaesthetists 2008, T1 - Recommendations of Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations - Interim Review 2008, ANZCA;
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists 2007, College Statement C-Obs 14: Decision to delivery interval for Caesarean Section, RANZCOG;
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists 2009a, College Statement C-Obs 2: Home Birth, RANZCOG;
- Royal Australian and New Zealand College of Obstetrics and Gynaecology 2009b, College Statement C-0bs14: Categorisation of urgency for Caesarean section, RANCOG; and
- Royal Australian and New Zealand College of Obstetrics and Gynaecology 2009c, College Statement C-0bs24: Warm water immersion during labour and birth, RANCOG.