Maternity Services

Module overview

Please note: This module must be read in conjunction with the Fundamentals of the Framework (including the glossary and acronym list).

The aim of maternity services is to achieve the safe provision of care for mother and baby, as close as possible to home. However, it is recognised that some women and their babies may need to travel outside their local community to access necessary care. A woman and her baby's health require ongoing evaluation at each of the following stages of care:

- at booking
- during pregnancy and the antenatal period
- during labour and birth
- during the postnatal period.

Ongoing health assessment of the woman will ensure she is cared for by the right maternity personnel, at the right time, in the right level of service. To facilitate this, maternity care is woman-centred, provided within a collaborative and cooperative framework, and supported by various health professionals. Care will be provided with respect for the woman's autonomy and consideration of best evidence. The provision of high-quality, safe maternity care is the primary catalyst for a healthy society. Maternal health directly affects an infant's physical and psychological health, which influences its health during childhood and adult years. Therefore, maternity services should align with neonatal services, and link to children's and adult services where required.

For most women, pregnancy, birth and the postnatal period are all aspects of a normal physiological life event. However, where a woman's pregnancy or birth becomes complex and a higher level maternity service is required, it is vital that efficient and safe mechanisms are in place within the existing level of service to facilitate consultation or referral to a higher level service. Urgency and escalation to this service must be congruent with the woman's and/or her baby's level of risk. Therefore, the capability of a maternity service is determined by the characteristics of the mother and complexity of the pregnancy, birth and postnatal period.

Continuity of carer—particularly that of a known midwife—has shown to be important to women and their families. Improved birth outcomes and higher satisfaction levels have been observed in women receiving continuity of midwifery care.[1,2,3] The cultural significance for Aboriginal and Torres Strait Islander women and families of birthing on homelands requires that consideration be given to birthing in local communities and on country.[4]

Therefore, maternity services will take account of cultural and clinical safety and, wherever possible, provide continuity of carer close to women's homes. Where continuity of carer is not possible, effective communication and documentation will facilitate a seamless continuity of care. During labour, women are to have access to continuous support and have one-to-one care by a registered midwife when in established labour.[5]

All models of maternity care, including rural cluster arrangements, must have a strong clinical governance framework that supports the delivery of primary care services and ensures that medical staff are credentialed and privileged for the maternity services they provide. Figure 1 illustrates a framework developed by the Office of the Chief Nurse.[2]

Figure 1: Queensland maternity clinical governance framework

Care may be provided by midwives, registered medical practitioners (general practitioners with credentials in obstetrics) or registered medical specialists with credentials in obstetrics who provide maternity care within their scope of practice. Regardless of the model of care—shared care, midwifery-led (public or private) or obstetric (public or private)—all care must be collaborative, cooperative and woman-centred. Women may receive care within the woman's home, a community setting or a hospital, which may be categorised and defined as:

- low risk: requiring primary care from a midwife or registered medical practitioner (general practitioner)
- moderate risk: requiring secondary care from a registered medical practitioner (general practitioner) or registered medical specialist with credentials in obstetrics
- high risk: requiring tertiary care from a multidisciplinary maternity team within a specialised service.[2,6]

Maternal care requirements cannot occur in isolation of the neonate. Therefore the Neonatal Services module should be consulted when determining locations and networks for care. Distance and geographical implications, as well as isolation, are important considerations when managing neonatal and maternity services in Queensland.[7] Best-practice evidence states that mothers and infants should not be forced to travel beyond their nearest referral centre (or centres, if they are more or less equidistant), and that higher level services should not transfer out their own high-risk mothers and infants.[8] Additionally, infants born outside the expected gestational age and weight for the service level capability may, depending on clinical decisions, be managed safely at the local level. However, this decision will be made after input from a higher level service and guided by the service's risk management strategy.

Where pregnancy termination is required or requested, a multidisciplinary approach to care is to be provided at the lowest service level that can safely facilitate this care. Consultation with a maternal foetal medicine unit should occur for women where foetal anomaly has been identified. Where termination of a live foetus from 22 weeks gestation or more is clinically indicated, the woman is to be referred to a Level 6 service with ability to provide this service.

The general support service requirements for maternity services include:

- access to child health services, including:
  - a child health immunisation schedule
  - hearing screening facilities and assessment[9,10]
  - perinatal mental health services
- access to Child Safety Services (Department of Communities) and early interventional services.

Service networks

In addition to what is outlined in the Fundamentals of the Framework, specific service network requirements include:

- care must be managed in consultation with a higher level maternity service if clinical management is considered beyond a service's capability (see Table 1—a maternity services capability level matrix that indicates when a higher level of care is required)
- culturally appropriate and evidence-based written information (or verbal, if written information is impractical for a woman's situation), together with support to enable women to make informed decisions about available pregnancy screening, including potential risks and benefits, the difference between screening and diagnostic testing, and possible cost implications.[11,12,13]

Table 1: Maternity service capability level matrix for birthing services (indicative only)

Minimum expected foetal characteristics	Maternal risk		
	Low	Moderate	High
	Clinical maternity service capability level		
37 weeks gestational age or greater	Level 2/3	Level 4	Level 5
32 weeks gestational age or 1500 grams	Level 4	Level 4	Level 5
29 weeks gestational age or 1000 grams	Level 5	Level 5	Level 6
Less than 29 weeks gestational age	Level 6	Level 6	Level 6

Note to table: Combines level of maternal risk with foetal gestational age and weight

Workforce requirements

In addition to what is outlined in the Fundamentals of the Framework, specific workforce requirements include:

- relevant staff in non-birthing facilities must attend education on imminent birth, preferably conducted by a midwife
- annual education that includes:
  - child safety training
  - basic neonatal resuscitation
  - multidisciplinary education on normal birth
  - breastfeeding competency

- where birthing services are offered, multidisciplinary maternity staff must have facilitated access[5,11,14,15] to fulfil regular education that includes:
  - electronic foetal monitoring (e.g. Royal Australian and New Zealand College of Obstetricians and Gynaecologists [RANZCOG] foetal surveillance education program or similar) at least 12 to 18 monthly
  - obstetric emergency training (e.g. Advanced Life Support in Obstetrics/Maternity Crisis Resource Management or similar) at least three yearly, where possible
  - neonatal resuscitation program or similar with a refresher at least two yearly
- consideration of non-midwifery staff employed in isolated and remote settings to attend Maternity Emergency Care Course conducted by Council of Remote Area Nurses of Australia
- nursing staff in maternity services may work in a supportive role under the supervision of a registered midwife.

Level 1 Maternity Service

Service description

A Level 1 service provides community antenatal and/or postnatal care for women and infants, and has no planned births or maternity inpatient services. If the service identifies maternal and/or foetal risk factors, it provides care in partnership with higher level services. A Level 1 service may have on-site visiting or outreach consultation midwifery or medical services. Registered midwives and/or registered medical practitioners (general practitioners) may provide services.

A Level 1 service can manage women or infants who require a higher level of care while it organises a transfer. A Level 1 maternity service is competent in providing basic life support for mothers and infants, and emergency measures to transfer them to a higher level service. The service has a documented process for consultation and referral links to higher level services within the relevant maternity service network.

Service requirements

As per module overview, plus:

- community, home or ambulatory pregnancy care and/or community or home-based postnatal care
- clear consumer information about service limitations, including advice and the implications of having no local birthing facilities
- hand-held pregnancy records available for women to carry[2,12,13]
- information for women about their care choices, including who will undertake the care, where it will take place and details of any associated costs[6,12]
- a clear, documented summary of care for the ongoing carer and written information about community postnatal and child health supports for women
- a midwifery health management plan and drug therapy protocol available[16]
- education on and support for parenting, bonding, feeding and lactation
- breastfeeding advice and support consistent with the Baby Friendly Health Initiative[17]
- access to antenatal, labour, birth and postnatal parenting education and resources, including dietary advice and support for women to stop smoking[12,14,18,19]
- access to physiotherapy education literature that covers antenatal and postnatal exercise, and baby handling and positioning guidelines
- access (either on-site or by referral) to individual physiotherapy advice or management for significant/disabling musculoskeletal or pelvic floor dysfunction
- access to routine ‘healthy hearing’ screening and diagnostic audiology services[10]
- a documented link or alignment to a hospital or community-based physiotherapy service
- routine antenatal and postnatal psychosocial assessment (or a process in place to ensure it occurs)[20,21]
- a shared-care arrangement between the shared-care provider and the maternity service, with access for community registered medical practitioners to continuing professional development[22]

- basic equipment for antenatal care (e.g. Doppler or Pinard's for auscultating foetal heart) and postnatal care
- access to a pathology service with the capacity to facilitate neonatal screening test, neonatal serum bilirubin test and neonatal blood glucose level check
- adult and neonatal emergency resuscitation capability
- emergency birth bundle on-site
- training and reliable communication systems to deal with imminent births[23]
- access by referral to ultrasound screening[12,24]
- midwives and registered medical practitioners who perform and interpret a cardiotocograph where this service is provided
- access to a cardiotocograph where a day assessment unit is offered.

Workforce requirements

As per module overview, plus:

Medical

- registered medical practitioners with a shared-care arrangement with the birthing facility for antenatal care[22]
- registered medical practitioners meet mandatory requirements for general continued professional development through either the Australian College of Rural and Remote Medicine and/or Royal Australian College of General Practitioners

Midwifery

- as per module overview

Allied health

- access to allied health professionals, as required, including physiotherapists, social workers, dieticians[10] and psychologists from the local area or via referral from midwifery staff or general practitioners (may be from visiting or outreach service)
- access to a clinical pharmacist[14]

Other

- access to child health services[25]
- access to a lactation service
- access or links to an Aboriginal and Torres Strait Islander liaison officer
- access to interpreter services and culturally appropriate maternity support
- Aboriginal and Torres Strait Islander health workers may assist with maternity care under a midwife's supervision.

Support service requirements

A Level 1 service requires:

Service	On-site	Accessible
medical imaging		3
medication		1
neonatal		1
pathology		2

Level 2 Maternity Service

Service description

A Level 2 service provides access to antenatal care and inpatient postnatal stay and/or postnatal community visiting. Only women experiencing the physiological onset of labour and progress without requiring induction or augmentation will access this service. Epidurals will not be available to labouring women.

A Level 2 service is primarily delivered by midwives and local registered medical practitioners. This service mainly provides antenatal and postnatal care for women and infants who do not have identified risk factors. Where a Level 2 service operates as a primary midwifery model of care, it must have in place both a risk management framework consistent with Australian and New Zealand *Risk Management Standard* 4360:2004[26] and a clinical governance structure for midwifery models as outlined by the Office of Chief Nursing Officer.[2]

A Level 2 service that provides birthing services has at least one dedicated birthing room and access to a functional operating theatre (not necessarily on-site). If a service has a theatre on-site, it may perform elective caesarean sections for women at or beyond 39 weeks who are experiencing an uncomplicated pregnancy.

This level of service can receive postnatal mothers and infants who are physiologically stable as back-transfers from higher level services, including infants with a gestational age of less than 37 weeks. The care of infants of less than 35 weeks gestational age must always occur in consultation with a higher level service within the relevant neonatal service network.

The service will have documented processes for consultation and referral with higher level services within the relevant service network. A Level 2 service is competent in providing basic life support for mothers and infants, and emergency measures to transfer them to a higher level service.

This service may provide limited birthing services 24 hours a day. This service may also provide planned care for healthy women with low-complexity singleton pregnancies of 37 weeks gestation or more, who are not expected to have labour or birth complications.

Service requirements

As per Level 1, plus:

- caesarean sections, where provided on-site, performed by a registered medical practitioner with credentials in obstetrics, a registered medical practitioner with credentials in anaesthetics, and at least one clinician, competent in providing neonatal resuscitation, who is available exclusively for neonatal resuscitation
- medical supervision must be available for women who undergo a caesarean section until they are ready to be transferred or discharged to midwifery care
- continuous labour support and a second attendant trained in neonatal resuscitation immediately available on-site to attend the birth, with the primary carer competent to manage obstetric emergencies in services where planned birthing occurs—there must be access to a registered medical practitioner with cannulation and perineal repair skills
- clear consumer information about service limitations, including advice and the

implications of local, low-risk birthing services (if birthing occurs at this level)
- documentation of birth outcome and postnatal management plan communicated to the ongoing carer[22]
- adherence to clearly documented, best-practice clinical guidelines for labour, birth and early postpartum care reviewed at least every 3 years (if birthing occurs at this level)
- documented processes to be reviewed at least every 3 years or more frequently if the service profile or skilled staffing levels change
- transportation, telecommunication, and multidisciplinary networks and support, including a documented process with higher level services (including telephone access—24 hours—to a registered medical specialist credentialed in obstetrics) within a relevant maternity service network to enable ongoing management at a host site or timely patient transfer, with the responsibility for patient management delineated if delay occurs[14]
- access to a functional operating theatre (not necessarily on-site) and the anaesthetic capability to bring about a baby's birth in an unplanned caesarean section within 75 minutes of booking the procedure, in normal circumstances[27,28]
- access to a registered midwife/registered nurse/anaesthetic assistant who fulfils Australian College of Operating Room Nurses standards to attend a caesarean section, where performed
- evidence-based options for pain relief in labour provided to women antenatally, including information on risks and benefits[29]
- use of a labour and birth pathway or partogram in facilities providing birthing
- access to electronic foetal heart rate monitoring equipment
- emergency blood transfusion capability (donor panel and/or O negative x 2 bags in stock)
- point-of-care testing (PoCT) blood analysis capability
- engagement with and contribution to perinatal mortality and morbidity network meetings
- audits of the appropriateness of, reason for and speed of transfer, including circumstances where transfer was indicated but did not occur[10]
- adult and neonatal emergency resuscitation equipment[30]
- may have access to alcohol and drug agencies.

Workforce requirements

As per Level 1, plus:

Medical

- may have a visiting registered medical specialist with credentials in obstetrics
- may have a registered medical practitioner with credentials in obstetrics, or shared-care arrangements between the registered medical practitioners (general practitioners)/facility-based registered medical practitioners and the birthing facility[31]
- a registered medical practitioner competent in completely examining a baby within 72 hours of birth[9]

- registered medical practitioners performing caesarean sections competent in providing neonatal resuscitation

Midwifery

- midwives who are enrolled in or have completed the Midwifery Practice Review program from the Australian College of Midwives (where a service provides a primary midwifery model of care)[6]
- midwives available 24 hours
- a ratio of one midwife to each woman in established labour where birthing occurs[5]
- competent midwifery staff to provide comprehensive labour and birth care (where birthing occurs at this level) as well as antenatal and postnatal services, including community care, where relevant

Allied health

- as per Level 1 service

Other

- access to a biomedical technician for equipment maintenance.

Support service requirements

A Level 2 service requires:

Service	On-site	Accessible
anaesthetic		3
medical imaging	3	
medication	2	
neonatal	2	
pathology		2
perioperative (operating suite)		3

Specific risk considerations

In addition to what is outlined in the Fundamentals of the Framework, specific risk management requirements relevant to Level 2 maternity services include:

- risk assessment undertaken antenatally, when a woman enters labour, during labour and after the birth, with clear pathways for referral or transfer[6,11]
- adherence to clearly documented, best-practice clinical guidelines, as outlined for a Level 3 maternity service, for services that perform caesarean sections
- blood taken for a blood group and hold when a woman is to have a caesarean section
- adherence to patient identification policies, including baby identification mechanisms
- adherence to clearly documented guidelines for managing obstetric emergencies
- guidelines for managing service delivery changes (i.e. reduced services or temporary closures)
- multidisciplinary training on coping with escalating maternity events[2,11,14]
- completion of a Queensland Perinatal Data Collection Form (MR63d) or electronic equivalent under the *Health Act 1937–1988* (Division 12—Perinatal Statistics).

Level 3 Maternity Service

Service description

A Level 3 service provides community and inpatient care for antenatal and postnatal women and babies who do not have identified risk factors. This level of service has planned birth care for healthy women with a pregnancy of 37 weeks gestation or more who are not expected to have labour or birth complications.

Women with a relatively low-risk pregnancy and a favourable Bishop score[32] at term may be offered labour induction locally within the service capability (e.g. gestational hypertension or pregnancy of at least 41 completed weeks). The service can also perform elective caesarean section on women at or beyond 39 weeks who have experienced an uncomplicated pregnancy.

Elective and emergency caesarean birth can be performed on-site within the service capability. A classification system determines the urgency of caesarean section.[31] A Level 3 service is delivered by midwives and registered medical practitioners credentialed in obstetrics and anaesthetics, accessible 24 hours a day.

This level of service may receive women who require an unplanned caesarean section from a lower level service where the decision has been made in conjunction with a higher level service. A Level 3 service has the capacity to receive postnatal mothers and infants who are physiologically stable as back-transfers from higher level services, including neonates and infants with a gestational age of less than 37 weeks.

This level of service may manage women who present in preterm labour at 35 weeks gestation or more, with an otherwise uncomplicated pregnancy, after consulting with a higher level maternity and neonatal service. A Level 3 maternity service should align with a Level 3 neonatal service.

The service has a documented process for consultation and referral links with higher level services within the relevant maternity service network. A Level 3 maternity service is competent in providing basic life support for women and neonates and in managing care in consultation with a higher level service. This level of service does not have an on-site adult intensive care unit, though it may have access to higher acuity maternity beds/bay.

Service requirements

As per Level 2, plus:

- all maternity clinicians must be competent in adult and neonatal resuscitation
- clear consumer information about the limitations of a low-risk birthing service, including advice and the implications of local care for women with identified risk factors
- adherence to clearly documented, best-practice clinical guidelines for elective and emergency caesarean sections, including:
  - counselling and consent processes
  - preoperative anaesthetic assessment and preparation
  - anaesthetic induction
  - operative procedure

  - attendance of support people
  - immediate and short-term post-operative care, including the adoption of baby-friendly health initiatives in a perioperative environment
- on-site access to portable obstetric ultrasound
- designated birthing rooms
- a labour-induction service for women with a relatively low-risk pregnancy
- emergency adult and neonate resuscitation equipment available 24 hours[30]
- an on-site, functional operating theatre to perform emergency caesarean sections
- access to inpatient maternity beds and a community midwifery service
- demonstrated ongoing expertise in managing maternity services at this level
- use of evidence-based, corporate clinical pathways that are reviewed at least every 3 years
- an environment that can manage high-acuity care until transfer
- midwifery and medical staff trained to conduct and interpret cardiotocography, including monitoring and assessing twin pregnancies.

Workforce requirements

As per Level 2, plus:

- at least one clinician competent in neonatal resuscitation available 24 hours exclusively for neonatal resuscitation

Medical

At least two of the following medical practitioners:

- access—24 hours—to a registered medical practitioner with credentials in obstetrics who is able to attend within 30 minutes in normal circumstances
- access—24 hours—to a registered medical practitioner with credentials in anaesthetics who is able to attend within 30 minutes in normal circumstances
- access—24 hours—to a registered medical practitioner who is able to attend within 30 minutes in normal circumstances

Midwifery

- a midwife nurse manager (however titled) in charge of maternity services
- a midwife available 24 hours

Nursing

- access to a child health nurse

Allied health

- access to outreach, community or hospital-based professionals, including physiotherapists, social workers and dieticians, as required
- access to individual physiotherapy postnatal management
- may have access to a psychologist

Other

- access—24 hours—to an anaesthetic assistant
- access to a lactation consultant
- access to an Aboriginal and Torres Strait Islander health worker.

Support service requirements

A Level 3 service requires:

Service	On-site	Accessible
anaesthetic	3	
intensive care		4
medical imaging	3	
medication	3	
neonatal	3	
pathology		3
perioperative (operating suite)	3	

Specific risk considerations

In addition to what is outlined in the Fundamentals of the Framework, specific risk management requirements relevant to Level 3 maternity services include:

- a clearly documented classification system for caesarean sections, which the service communicates across the service to ensure that all personnel and departments give a timely response
- an audit of caesarean section outcomes in relation to the classification system conducted at least annually.

Level 4 Maternity Service

Service description

A Level 4 service is capable of providing maternity care for low- and moderate-risk women, but cannot care for women with complex, high-risk conditions (e.g. cardiac; complex, non-lethal congenital abnormalities in foetuses; and complicated multiple births).

A Level 4 service has multidisciplinary maternity staff and offers several maternity models of care, including providing or referring to midwifery community care. Antenatal care for women with moderate risk of obstetric complications may be on-site or in the community under the care of a midwife or registered medical practitioner (general practitioner) in consultation with or under the care of an obstetrician. High-risk antenatal clinics may be provided as a satellite or outreach from a higher level service.

A Level 4 service can care for pregnant women at 32 weeks gestation or more if a continuous positive airway pressure (CPAP) device is available on-site for the neonate, and the neonate is expected to have a birth weight of 1500 grams or more with no additional risk factors. If a CPAP device is not available on-site, this level of service can plan and deliver care for pregnant women with gestational age of 34 weeks or more.

The service must have documented processes with higher level services for rapidly transferring higher risk women for ongoing care and management. A Level 4 service has dedicated birth suites, a maternity unit that provides for high-acuity women and access to a neonatal nursery and paediatric staff.

Service requirements

As per Level 3, plus:

- the capacity to ventilate and manage the care of a critically ill woman awaiting transfer[5]
- on-site access to high-acuity maternity beds
- the capacity to provide antenatal day assessment
- an on-site adult intensive care unit, or a documented process with an off-site intensive care unit to support care for critically ill women
- emergency adult and neonatal resuscitation equipment available 24 hours
- access arrangements for immediate consultation with a registered medical specialist with credentials in intensive care medicine at an off-site service
- the capacity to undertake intrapartum foetal blood sampling on-site[5,15]
- the capacity to undertake arterial and venous cord blood gas sampling for analysis, where the service performs caesarean sections or operative births due to concern for foetal compromise, or where a neonate is born in poor condition[5,15]
- the capacity to manage clinically appropriate labour induction in line with best practice[33]
- lactate- or pH-measuring equipment for foetal blood sampling and paired cord blood analysis.

Workforce requirements

As per Level 3, plus:

Medical

- a clinician with responsibility for clinical governance of the service who is also a registered medical specialist with credentials in obstetrics
- a registered medical specialist with credentials in obstetrics (with the qualification of Fellowship of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists)
- access—24 hours—to a registered medical specialist with credentials in obstetrics hours who can attend within 30 minutes, in normal circumstances, with arrangements to incorporate fatigue management strategies[34]
- access—24 hours—to a registered medical specialist with credentials in anaesthetics who can attend within 30 minutes in normal circumstances
- a registered medical specialist with credentials in paediatrics and experience in neonatal care available 24 hours who can attend within 30 minutes in normal circumstances
- access—24 hours—to a third registered medical practitioner to assist at caesarean sections who can attend within 30 minutes in normal circumstances
- where a registered medical practitioner is enrolled in an obstetric training program (RANZCOG registrar) and rostered without a registered medical specialist with credentials in obstetrics on-site, that registrar must have access—24 hours—to a registered medical specialist with credentials in obstetrics who can attend within 10 minutes in normal circumstances (if the registrar has less than 4 years obstetric experience) or within 30 minutes in normal circumstances (if the registrar has more than 4 years obstetric experience)
- obstetrician to patient staffing ratios must take into account fatigue management requirements for medical staff as well as leave entitlements
- access to a registered medical specialist with credentials in psychiatry
- access to a registered medical specialist (consultant physician)

Midwifery

- a minimum of two registered midwives at any time in the birth suite when it is occupied or a delegated second registered midwife immediately available to attend (only when the birth suite is jointly located with another maternity ward)
- a minimum of two registered midwives at any time in maternity units
- a registered midwife in charge on each shift
- registered midwives on-site 24 hours
- midwifery students under the direction of a midwife
- a midwife in charge of the shift (team leader) with a reduced clinical load or another midwife (supernumerary to roster) rostered to the shift in facilities capable of supporting medical training

Allied health

- access to allied health professionals as required, including dieticians, physiotherapists, social workers/pastoral care workers, diagnostic imaging, mental health, and alcohol and drug agencies

Nursing

- as per Level 3 service

Other

- access to an on-site community lactation service.

Support service requirements

A Level 4 service requires:

Service	On-site	Accessible
anaesthetic	3	
intensive care		4
medical imaging	4	
medication	4	
neonatal	4	
pathology		4
perioperative (operating suite)	3	

Level 5 Maternity Service

Service description

A Level 5 service is capable of providing planned care for women at 29 weeks gestation or more with infants who are expected to have a birth weight of 1000 grams or more. This service is a multidisciplinary service with the capacity to manage all unexpected pregnancy and neonatal emergency presentations. This service is also a referral service for lower level maternity patients, providing comprehensive obstetric and neonatal care, and a range of surgical and medical specialist services with access to mental health and allied health support.

This level of service provides multidisciplinary care for low- to high-risk pregnancies and can undertake invasive, antenatal diagnostic procedures (e.g. amniocentesis). Core service provision includes close monitoring and early intervention by trained obstetricians and midwives, registered medical specialists with credentials in neonatology or paediatrics, registered nurses (neonatal) and obstetric physicians.

In a Level 5 service, a registered medical specialist credentialed in obstetrics provides clinical advice and support to lower level services 24 hours a day. An obstetric theatre is immediately accessible 24 hours a day and an obstetric anaesthetic service is on-site 24 hours a day. A registered medical specialist credentialed in obstetrics is present in the birth suite during business hours and available at all other times 24 hours a day. The service must have a documented process with a Level 6 service for rapidly transferring stable, higher risk women for ongoing care and management.

The service may provide antenatal care for women with a high risk of obstetric complications on-site or in the community under the care of a registered medical specialist (obstetric physician), or the care of a midwife or registered medical practitioner (general practitioner) in close consultation with a registered medical specialist credentialed in obstetrics.

The service may provide a maternal foetal medicine service in conjunction with, and as an outreach of, a Level 6 maternity service, but maternal foetal surgery is performed only at a Level 6 maternity service. It may also provide high-risk antenatal clinics as a satellite or outreach clinic from this level service or in conjunction with a Level 6 service.

Service requirements

As per Level 4, plus:

- access to long-term patient/family accommodation close to the campus
- a referral unit within the relevant maternity services network
- access to and support for data collection and clinical audit
- network perinatal mortality and morbidity meetings conducted or contributed to, where possible, in partnership with Level 6 maternity service
- active participation in or contribution to a perinatal database and/or a comparison of clinical measurements against a minimum statewide data set
- a full range of antenatal, birthing and postnatal care facilities, including dedicated birth suites, an antenatal day assessment unit, allocated inpatient beds within a maternity unit and dedicated maternity beds for the acute care of high-acuity patients

- a lactation service
- a perinatal loss service
- a documented process with registered medical specialists with specific perinatal expertise for women who require expert care in areas such as endocrinology and cardiology
- access to one dedicated obstetric theatre 24 hours for every 4000 births[31] with the capacity to open a second operating theatre concurrently
- access to adult and neonatal emergency resuscitation equipment within the unit
- access—24 hours—to cardiotocograph monitoring within birth suites and inpatient areas
- an ultrasound machine in the birth suite 24 hours
- the capacity to measure and permanently document foetal and cord blood gases
- access—24 hours—to endocrinology, infectious disease, urology and vascular services
- access to subspecialist services (e.g. obstetric medicine) through a documented service agreement with a higher level service
- specialist emergency resuscitation staff available 24 hours
- midwifery and medical staff trained to conduct and interpret cardiotocography, including monitoring, assessing and managing very preterm and other high-risk pregnancies 24 hours
- a midwifery coordinator, where relevant, to support maternity network services across a rural and regional service
- a minimum of 50 percent of all employed (full- or part-time) staff with or working towards a recognised breastfeeding competency.

Workforce requirements

As per Level 4, plus:

Medical

- registered medical specialists with credentials in obstetrics and certification in maternal foetal medicine from the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) providing care in the subspecialty of maternal foetal medicine
- registered medical specialists with credentials in obstetrics and certification in obstetrical and gynaecological ultrasound from the RANZCOG providing care in the subspecialty of obstetric and gynaecological ultrasound
- a radiologist on-site during business hours
- facilities capable of supporting medical training should have:
  - registered medical specialists with credentials in obstetrics in the birth suite during business hours and accessible 24 hours (see Level 4 workforce requirements)
  - a registered medical practitioner who is enrolled in obstetric training program equivalent to a fourth, fifth and sixth year RANZCOG registrar assigned to birth suites on-site 24 hours and a second registered medical practitioner with skills in obstetrics available 24 hours who is able to attend within 30 minutes in normal

circumstances
  - registered medical practitioners in an anaesthetic training program assigned to birth suites on-site 24 hours
  - registered medical practitioners in a paediatric training program on-site 24 hours (as per Level 5 service)

Midwifery

- a nursing and midwifery lead clinician with responsibility for clinical governance of the service within the obstetric division with a midwifery qualification as a minimum and demonstrated contemporary knowledge of national and international, evidence-based maternity trends
- a minimum of two registered midwives at any time in the birth suite
- a minimum of two registered midwives at any time in maternity units
- a registered midwife in charge in birth suites who may have relevant management and/or postgraduate qualifications in midwifery, and has relevant clinical experience commensurate with the position
- a registered midwife in charge for each maternity speciality area who may have postgraduate qualifications in midwifery, and has relevant clinical experience commensurate with the position
- a registered midwife to coordinate the care of high-risk women
- access to a registered midwife (consultant/practitioner) within business hours for specialty areas
- facilities capable of supporting medical training should have:
  - a registered midwife rostered 24 hours as birth suite team leader with relevant qualifications, including current emergency skills response (minimum 3 years postgraduate experience), who is not allocated a clinical load
  - a registered midwife rostered 24 hours as maternity unit/s team leader with relevant qualifications, including current emergency skills response, (minimum 3 years postgraduate experience) who is not allocated a clinical load

Nursing

- as per Level 4 service

Allied health

- access—during business hours—to allied health professionals (as required) including identified dietician, occupational therapist, social worker/pastoral care worker, physiotherapist, occupational therapist and speech pathologist
- access—24 hours—to a physiotherapy service
- on-site access—during business hours—to sonographers
- access—24 hours—to an identified pharmacist
- access—24 hours—to a scientist

Other

- access—during business hours—to a lactation consultant service which has staff accredited by the International Board of Lactation Consultants
- access—during business hours—to a genetic counsellor

- access—24 hours—to a pastoral care worker
- access—during business hours—to an alcohol and drug service, as required
- access to an Aboriginal and Torres Strait Islander liaison officer.

Support service requirements

A Level 5 service requires:

Service	On-site	Accessible
anaesthetic	5	
cardiac (cardiac medicine)		5
intensive care	5	
medical		5
medical imaging	5	
medication	5	
neonatal	5	
nuclear medicine		5
pathology	5	
perioperative (operating suite)	5	
surgical		5

Level 6 Maternity Service

Service description

A Level 6 service provides all levels of care, including the highest level of complex care for women with serious obstetric and foetal conditions that require high-level multidisciplinary care. This level of service can include acute onset and long-term health problems, which affect a mother and her unborn baby or neonate, and require: preconception care; early intervention; stabilisation, treatment and management; and longer term follow-up. Core services include close monitoring and early intervention by specially trained registered medical specialists credentialed in obstetrics, midwives, neonatologists, registered nurses (neonatal), maternal foetal medicine specialists, and obstetric physicians.

This is the only service level that provides maternal foetal medicine and maternal foetal interventional surgery. Additionally, the service refers women who request pregnancy termination due to foetal anomaly before being assessed by a maternal foetal medicine service to a Level 6 service for a care plan. A Level 6 service will provide the initial management of women who require the termination of a live foetus at 22 weeks gestation or later.

This level of service is multidisciplinary and has the capacity to manage all unexpected pregnancy and neonatal emergencies. It provides services in a large metropolitan hospital (where a population is greater than 100,000)[35] with on-site access to a Level 6 neonatal service.

This service is also a referral service for lower level maternity patients and can provide comprehensive obstetric and neonatal care, and a range of surgical and medical specialist services, including mental health and allied health support. A Level 6 service provides clinical advice and support by a consultant registered medical specialist credentialed in obstetrics 24 hours a day. Clinical teams can undertake neonatal retrieval when required.

A Level 6 service plays a strategic role in the clinical planning of statewide services related to perinatal care. A Level 6 service will be provided with data support at a state level to trend perinatal and maternal morbidity and mortality data.

Service requirements

As per Level 5, plus:

- a statewide referral unit
- service network perinatal mortality and morbidity meetings conducted with engagement and inclusion from lower level services within the maternity service network
- full range of antenatal, birthing and postnatal care delivery and on-site facilities, including dedicated birth suites, antenatal day assessment, allocated inpatient beds within a designated maternity unit and dedicated maternity beds for acute care of high-acuity patients
- the capacity to measure and permanently document foetal blood gases
- a maternity service that provides comprehensive specialist services, including, but not restricted to, midwifery, obstetric, mental health and surgical care for women with high-risk complex needs 24 hours

- access to subspecialty services (e.g. maternal foetal medicine, obstetric medicine or equivalent) including outreach service to lower level services
- documented processes with lower level services within a relevant maternity service network to enable ongoing management at a host site or timely patient transfer
- access on-site—24 hours—to an obstetric tertiary imaging service.

Workforce requirements

As per Level 5, plus:

Medical

- a registered medical specialist with credentials in obstetrics and subspecialty accreditation in maternal foetal medicine (or equivalent) on-site during business hours

Midwifery

- a lead clinician with responsibility for clinical governance of the service with a midwifery qualification as a minimum

Nursing

- as per Level 5 service

Allied health

- as per Level 5 service

Other

- as per Level 5 service.

Support service requirements

A Level 6 service requires:

Service	On-site	Accessible
anaesthetic	5	
cardiac (cardiac medicine)		5
children's anaesthetic		6
intensive care	5	
medical	6	
medical imaging	6	
medication	5	
neonatal	6	
nuclear medicine	5	
pathology	6	
perioperative (operating suite)	5	
surgical	5	

Legislation, regulations and legislative standards

Refer to the Fundamentals of the Framework for details.

Non-legislative standards, guidelines, benchmarks, policies and frameworks

In addition to what is outlined in the Fundamentals of the Framework, the following are relevant to maternity services:

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- Queensland Government. Midwifery models of care: Implementation guide. Queensland Health; 2008. www.health.qld.gov.au/ocno/content/middy_models.pdf
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