



Queensland Maternity Services – Discussion Paper

AMA Queensland's Vision for Queensland Public Hospitals

In early June 2016 the Central Queensland Hospital and Health Service report into Maternity Services at Rockhampton Base Hospital (RBH) was released. This independent investigation was commissioned due to several poor outcomes for mothers and neonates in the recent past. There were numerous issues identified particularly in terms of staffing and these issues are common in regional hospitals. There were deficiencies in midwife training, significant cultural issues, poor recognition of deteriorating patients with slow escalation to the obstetrician and a paucity of obstetrician involvement in risk assessment and clinical team leadership.

AMA Queensland believes the results of the Rockhampton Hospital Maternity Service review findings are reflective of long-standing practice challenges faced by maternity services across Queensland. There has been a slow transition to midwifery led practice in recent years with a subsequent reduction in involvement by the obstetrician in public hospitals. It is possible for a mother in a public hospital maternity service to receive all of her antenatal care and management of labour without ever being assessed by a consultant obstetrician. This contrasts with the private sector within which the obstetrician directly manages the care of mothers with more regular review antenatally, during labour and after delivery. This latter practice of obstetrician led care ensures risk is managed appropriately and any co-morbidity or extra precautions to improve patient safety are properly considered.

It is clearly inappropriate for an obstetrician to only be made aware of a labour problem once it has become acute or serious, sometimes many hours after it began to develop. The obstetrician is then expected to assume all responsibility for the care and outcome of the mother and baby. This scenario is reported to be frequent in our public hospitals and results in potential inappropriate delay to definitive care. The current public hospital maternity services model could best be described as midwife-led with obstetrician rescue.

An obstetrician has had broad medical education in addition to their specialty training, spanning over approximately 15 years in total. This has provided an expert clinical and surgical skill set to assist mothers and babies in all clinical scenarios — both normal and abnormal. By contrast, midwifery training has a narrower scope and is significantly shorter. Despite not being as broadly trained in the impact of comorbidities or complications of pregnancy and not being able to manage all deviations from normal in a pregnant or labouring mother, in public hospitals it is the midwife who is sometimes managing a patient's entire pregnancy and labour. This is a likely causative factor in the differential outcomes recorded between midwifery- and obstetrician-led care.

AMA Queensland believes it is vital that Queensland's expectant parents have confidence in the public hospital system's ability to safely deliver their newborn child into the world. In this submission, we will outline what issues we feel need to be addressed to ensure that confidence is well placed.

Obstetrician-led care versus Public Hospital Midwife-led care

Private hospital labour suites involve a multi-disciplinary model of care, but clinical teams are led by an obstetrician. In addition, the patient is reviewed regularly by the obstetrician throughout the course of their pregnancy and during labour, with the delivery directed by the obstetrician. By contrast, public hospital maternity services are led by midwives and it is possible for a labouring mother to have no obstetrician review unless a midwife requests obstetrician review (which is not mandatory). The marginalisation of the obstetrician in public practice has occurred gradually, but relentlessly over many years. This decreasing direct involvement of the highly trained obstetrician is a significant cause of the inferior outcomes endured by mothers and their babies in public hospital maternity services.

There is compelling recent Australian evidence that women accessing 'low risk' models of care delivered by midwife teams and birth centres in large public hospital units, have a significantly higher perinatal mortality rate (2.3/1000) when compared to that of women accessing traditional obstetrician led care (1.2/1000).

The AIHW National Core Maternity Indicators stage 3 and 4 results from 2010-2013² identified that amongst women whose birth was considered to be low risk, 25.3% had an assisted (instrumental) delivery in 2013, an increase from 22.8% in 2004. The caesarean rate amongst this same sub-set of mother's was 27.5% and this had similarly increased from 25.3% in 2004. Therefore, critical obstetrician assistance is required in almost half of all births amongst mothers from a low-risk group, and this requirement is increasing. The report suggests this trend might relate to increasing maternal age and pre-existing co-morbidities.

The obstetrician-led model of 'mixed-risk' care is associated with higher rates of obstetric treatments and assistance, but not only did this translate to lower mortality for those babies, as above, obstetrician-led care was also associated with higher (more favourable) Apgar scores¹ at 5 minutes (9.0/1000 obstetric-led care versus 6.7/1000 in midwifery-led care), reflecting improved neonatal health in mixed-risk obstetric-led models of care. In addition, the AIHW National Core Maternity Indicators stage 3 and 4 results from 2010-2013 notes that the proportion of babies born with poor Apgar scores has actually increased from 2010 to 2013 in public hospitals, but has remained stable (and lower) in private hospitals². These favourable outcomes for the obstetrician led care are independent of socioeconomic factors and refute the argument that even perceived low-risk care can be successfully undertaken without obstetrician input.¹

A recent retrospective study of outcomes in more than 244,000 mothers and term neonates in New Zealand concluded there was excess adverse events in midwife-led deliveries, where midwives practice autonomously, in contrast to medical-led maternity care.³ Compared to midwife-led care, medical-led care was associated with a substantially lower risk of:

- > unfavourable (lower) 5 minute Apgar scores (48% lower)
- > birth-related asphyxia (55% lower)
- > intrauterine hypoxia (21% lower)
- > neonatal encaphalopathy (39% lower).

Medical-led births were also associated with a lower risk of stillbirth and neonatal mortality. In interpreting this data, it should be noted that the model of autonomous midwife-led care is New Zealand that led to this excess of adverse events is very similar to the model of midwife-led care in Australia.

Lessons from the Private Hospital Sector

There is compelling data that the morbidity and mortality rate for mothers and neonates is significantly lower in the private system, where care is led by an obstetrician, as opposed to the public system, where care is led by the midwife with scant involvement of an obstetrician^{4.5}. This finding remains significant when adjusted for age, body mass index, co-morbidities and case complexity. According to the Queensland Maternal and Perinatal Quality Council Report 2015, the perinatal mortality rate (7.4 vs 11.1 per 1000 births), still birth rate (5.5 vs 7.4 per 1000 births) and neonatal mortality rate (1.9 vs 3.7 per 1000 births) are all significantly lower in private hospitals as compared to public hospitals⁵.

It has been found that rates of obstetric treatments and caesarean sections are higher in private hospitals, as compared to the public system^{5,6}. This data is distorted by the previous practice in New South Wales whereby maternal request alone was not an indication for caesarean section, and the significantly higher age of mothers in the private hospital system⁵. The difference in obstetric treatment rates is however logically different between the public and private systems given the involvement of obstetricians who are solely trained to provide this assistance. This same data also shows the superior outcomes for neonates (as determined by the Apgar score, admission to intensive care and neonatal survival) in private hospitals compared to public hospitals. This result has been replicated, and a greater than three-fold increase in 3rd or 4th degree perineal tears in labouring mother's and higher rates of labour/birth complications in the public system compared to private institutions, also highlighted by other authors^{5,7}.

The higher obstetrician treatment rates found in the private system are therefore related to the improved maternal and neonatal outcomes. This data emphasises the benefit to both women and babies of having care givers who are trained and able to identify complications of pregnancy early and administer appropriate assistance, which in some cases will be life-saving. In other words, the earlier the obstetric involvement, the more timely the assistance, and hence the better the outcome.

The Australian Commission for Safety and Quality in Health Care has published a list of hospital acquired complications⁸. These sixteen complications have been determined for their preventability, as well as their impact on the health service and the patient. Two of the identified complications are perineal tears and birth trauma, both of which have been shown to occur more frequently in public hospital, midwifery led care.

Obstetricians have significantly greater training than midwives, including surgical skills. Therefore, they have a broader and higher level of skills together with experiential insight to achieve the improved outcomes for mother and child. This does not detract from the important work undertaken by midwives in the care of patients, but merely points out the obvious training and role differences that should create a clear difference in clinical responsibilities. The greater training and sole ability of the obstetrician to treat numerous complications of pregnancy necessitates their role as clinical team leaders, as recommended by the RBH report.

What the RBH Report Reveals

The RBH Maternity Services report clearly indicated that there needed to be greater input into a women's care and coordination of multi-disciplinary team efforts by an obstetrician. Many of the recommendations evince a disturbing deviation from good medical practice and reflect a detrimental marginalisation of the obstetrician. Some of the report's key recommendations to note are:

- > A nominated consultant must have, as their sole responsibility on an on call day, coverage of Birth Suite and management of acute gynaecological admissions.
- > RBH should have multi-disciplinary, up-to-date, evidence based policies that articulate when a woman, whose labour has clearly deviated from normal, needs medical review.
- > Antenatal triaging of women to ensure they receive consultant obstetric input as required in a timely way
- > Consideration is given to structuring the maternity services in four teams, each one headed by an Obstetric and Gynaecology consultant.

AMA Queensland understands Queensland's Department of Health is considering options to improve the safety and quality of care offered in public hospital maternity departments in this state. As part of this exercise the department is assessing the workforce and workload of each service. There is also an intent to hold a multi-disciplinary forum to allow consultation with senior obstetricians, midwives, and stakeholders.



Proposed Changes to maternity Services Model of Care

AMA Queensland has argued for many years for an improved model of care that allows a leading role and direct involvement of the obstetrician in the management of pregnant and labouring mothers. The evidence, summarised above, suggests this will lead to improved morbidity and outcomes for mothers and neonates in the public hospital system. The five key components of AMA Queensland's suggestions for improvement are:

- Obstetrician/Obstetric registrar review of all new patients when they visit a public maternity service for their first antenatal visit as a formal and separate encounter before the patient is seen by midwifery staff.
- Obstetrician/obstetric registrar/resident review of all women on admission to the labour suite, for risk analysis and treatment planning to occur and be documented in the permanent birth record.
- 3. Obstetrician/obstetric registrar review and examination of all labouring women at least every four hours to assess progress and alter treatment plans according to findings.
- 4. Restoration/increase of senior salaried (SMO) and visiting medical officer (VMO) consultant obstetrician workforce.
- Restoration of communication with and involvement of the patient's usual General Practitioner to provide shared care in the community.

 Obstetrician/Obstetric registrar review of all new patients when they visit a public maternity service for their first antenatal visit.

The initial antenatal visit of a woman at a Maternity service is an important opportunity to assess the possible impact of co-morbidities and risk that might be associated with the ensuing pregnancy. This assessment requires obstetrician involvement but at present this does not always occur and may only occur in a suboptimal, ad-hoc manner. The medical assessment of all new patients referred to a hospital is standard practice in all other hospital departments. Ideally this should be undertaken by a registrar or consultant leading each team of doctors providing care.

The outcome of the first antenatal visit should include a full characterisation of medical risk with any appropriate further testing organised and an appropriate review schedule based on the patient's risk profile established. This may include regular scheduled medical review. This critical initial medical review and planning is an important step in improving patient (mother and baby) safety. Discussion would occur with midwifery colleagues regarding how best to arrange antenatal appointments and what symptoms/findings would trigger additional medical review. It is important to emphasise this practice improvement would involve an obstetrician/obstetric registrar review of the patient's history with physical examination and review of any other relevant results – not just mere supervision or sign-off of midwife assessment. As would be standard, this medical assessment and plan would be communicated with the General Practitioner who is also sharing the care of the patient.



2. Obstetrician/Obstetric registrar/resident review of all women on admission to the labour suite

It is the accepted standard of care that all patients admitted to a public hospital receive medical review and a medical management plan. The only circumstance in which this does not always occur is for admissions to the labour suite. The initial medical assessment is crucial for re-assessing risk to the mother and neonate and for putting in place a management plan and review schedule for the remainder of the labour/admission. There may also be a requirement for further testing or sub-specialty review, which can be organised as part of the admission plan. As above, this practice improvement emphasises the critical importance of medical history taking, physical examination and review of relevant results.

Obstetrician/Obstetric registrar review and examination of all labouring women at least every four hours to assess progress

Women admitted to the labour suite are in danger of not having an initial medical review, but have midwifery-led care throughout their labour unless it is realised that there is a complication or obvious difficulty arises. The Rockhampton Hospital Maternity Service review indicated this realisation does not always occur and the training of midwives is not sufficient to appropriately identify, manage and escalate to the obstetricians when patients are deviating from normal.

The philosophy of midwifery is to care for the 'normal' woman during labour and delivery, and trust a woman's body to safely deliver her child. Changes in how obstetric care is administered means that a midwife working in a more independent fashion may become deskilled over time at recognising deviations from normal progress in early stages, as identified as a concern by the Rockhampton Hospital review team. If only the 'normal' is seen, it may make early recognition of deviations/complications more difficult or impossible, and lead to delay in accessing obstetrician assistance. Compounding this deskilling of midwives is the very real perception of some midwives that asking for obstetric assistance is seen as a 'failure' and thus seeking this assistance is delayed. The inability to recognise deviations from normal and hesitancy or reluctance to seek specialist obstetrician assistance causes delay in addressing difficulties for mothers or their neonates and allows evolution and in some cases, exacerbation of pathology.

The obstetrician is the only health care profession with the training and experience to identify all complications and difficulties for a labouring mother and to decisively manage them. In order to optimise outcomes for mother and neonate, it is necessary therefore for the obstetrician or obstetric registrar to have regular opportunities to review the labouring mother to examine the patient and assess progress. In the absence of this assessment, it is possible that an obstetrician or obstetric registrar only reviews the patients in order to repair the perineal tear after it has occurred or manage a complication after it has developed and/or become severe, even if earlier treatment could have avoided or minimised the deleterious impact. This is the main reason preventable complications are more frequent and outcomes inferior for mothers and neonates in public hospitals providing midwifery-led care models.

It is proposed that the obstetrician or obstetric registrar review and examine the patient and liaise with the attending midwife at least every four hours during labour. This may need to be more frequent depending on the initial medical assessment and progress of the labour. This recommendation is no different from the immutable expectation of regular medical officer review of medical and surgical patients that occurs throughout the hospital. Other high acuity areas of the hospital

such as intensive care unit/coronary care unit have a formalised system of regular reporting and review by medical officers. Similar systems could be introduced into labour wards.

4. Restoration/increase of senior salaried (SMO) and visiting medical officer (VMO) consultant obstetricians

The medical workforce is traditionally comprised of salaried doctors (either full-time or part-time) and visiting medical officers (VMO). Most procedural disciplines have a mix of all types of medical officer employment. VMOs, together with salaried senior medical officers, have an important role in training and education, but also their experience of other workplaces enables easier sharing of process or policy improvements between services. In addition, ensuring an appropriate full complement and mix of senior obstetricians with broad experience means they are uniquely placed to provide advice on what has been successful or not met expectations in comparable institutions. The role of the obstetrician necessarily must be reinstated as the leader of the multidisciplinary team in the proposed model of care for all patients, and may require additional consultant obstetricians to be employed. This will provide the opportunity to build a more diverse, broadly experienced consultant obstetrician workforce.

The VMO perspective across institutions and between the public and private sectors needs to be fostered, in contrast to the recent trends to selectively diminish VMO consultants. Predominant or exclusive employment of full-time salaried senior staff doctors potentially stifles fearless comparison with other services and pursuit of positive reform. Part-time SMOs or VMOs who are not solely dependent on a single hospital or employment source for their income are unencumbered by fear of reprisals or termination should they attempt to draw attention to poor practices or clinical outcomes and improve models of care. An expanded, broadly experienced staff of senior obstetricians comprising both full- and part-time salaried and visiting doctors is therefore ideal.

5. Restoration of communication with and involvement of the patient's usual General Practitioner

As the hospital model of care has migrated away from obstetrician involvement the inclusion of the General Practitioner has also reduced. Anecdotally, General Practitioner's widely report a significant reduction in their involvement in antenatal care of their shared patient and correspondence with the hospital maternity service in regard to the management plan/suggestions. The shared care model of care with the General Practitioner recognises they may well have known the patient for many years and being aware of the patient's entire medical history, are well placed to monitor conditions that may worsen during or as a result of pregnancy that may not usually fall within the purview of the hospital obstetric team. In particular, the General Practitioner has a critical role in conveying specific questions and issues regarding pregnancy/delivery risk stratification and a role in monitoring of the pregnancy, in conjunction with the hospital multi-disciplinary team. Even when an episode of care has previously exclusively involved a midwife, there should still be correspondence back to the General Practitioner.

This care requirement continues into the postpartum period where the majority of care falls into the realm of the General Practitioner who may have received little or no information about the pregnancy and delivery. Most public hospitals in metropolitan areas no longer offer routine postnatal care to women and not all babies delivered are checked by a Paediatrician following delivery (which may be only 2-6 hours postpartum) prior to discharge. This places the burden of postnatal care upon the General Practitioner.

Conclusion

Current evidence and the RBH Maternity Services review suggest there is significant scope to improve the quality of care and outcomes for mothers and neonates in the public hospital system. Critical to achieving this, is a meaningful increase in the early and ongoing medical assessment of pregnant mothers throughout their antenatal care and labour. The proposed initial and regular medical officer review of patients is in line with standard practice in all other disciplines within the hospital. AMA Queensland acknowledges the benefit of multi-disciplinary care and supports this model in maternity practice, However this cannot be achieved without intimate involvement of the obstetrician and medical team, under the leadership of an obstetrician, as recommended by the Rockhampton Base Hospital review.

The shift to midwifery group practice in recent years has paradoxically diminished the role of the obstetrician and led to a clear dichotomy in outcomes between midwifery- and obstetrician-led care. Obstetric leadership of multidisciplinary team care of women in public maternity units in Queensland will allow this detrimental trend to be positively addressed.

AMA Queensland recommends the proposed changes to maternity services be adopted. The National Association of Specialist Obstetrician and Gynaecologists and AMA Queensland are willing to assist the Queensland Government in the implementation of the proposed practice improvements.

References

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