



Maternity High Body Mass Index and Bariatric Surgery Risk Management Policy

1. Background

The King Edward Memorial Hospital (KEMH) guideline [Management of a Woman with Increased Body Mass Index](#) sets out the risks for and management of women with a high Body Mass Index (BMI) across the continuum of pregnancy and childbirth. This includes some additional guidance for pregnant women who have had prior bariatric surgery.

1.1 For WACHS

A pre-pregnancy BMI of:

- 35 – 35.9 places the obese woman at moderate risk of obstetric complications
- 40 or more places the obese woman at high risk of obstetric complications.

A lack of early identification of women with an increased BMI risk, or a history of bariatric surgery, or a clear management plan to reduce those risks is likely to cause undue distress to women and families. This is particularly true when they are surprised by the need to transfer to a regional or tertiary centre for specialist care late in the pregnancy.

Early identification of women at risk with a clear management plan, made in collaboration with the woman, to minimise her individual risks is known to improve health outcomes for her and her baby.

2. Policy Statement

This policy deals specifically with the safe management of the obstetric and anaesthetic risks associated with the obese pregnant client or those with a history of bariatric surgery.

To determine whether a site can safely manage the manual handling risks associated with the pregnant, obese client refer to the WACHS [Risk Assessment for the Admission of the Heavier Patient Policy](#).

Sites need to consider the latest safe working load and size is as important as weight (**as at April 2018**) for:

- **RFDS:** Generally women over 150kg require specific bariatric retrieval equipment and retrofitting of plane. Accurate patient weights are therefore required when advising transport services
- **St John Ambulance:** The trolley weight capacity is 239 kg but as the trolleys are narrow, they generally will not fit anyone over 190kg.

2.1 Maternity site capabilities

Each maternity site needs to convene a multi-disciplinary team meeting (including the maternity and theatre managers, hospital management, obstetric and anaesthetic doctors, Safety and Quality) to determine their absolute weight limit to safely manage the risks associated with the obese pregnant woman. The meeting needs to consider:

1. women at moderate risk (BMI 35 – 39.9) and those at high risk (BMI \geq 40)
2. the safe working load of available equipment – theatre table, commodes, beds etc.
3. access to consultant obstetrician opinion / assistance
4. access to consultant anaesthetist opinion / assistance
5. available clinical equipment – FSE (fetal scalp electrode), extra length epidural needles
6. access to reliable ultrasound
7. access to dietetic and exercise support
8. access to the Regional Resource Centre
9. available transport services if transfer is required.

2.2 Risk management of a BMI 35 or greater

2.2.1 The doctor/ midwife is to discuss the increased risks with the woman at the first visit to ensure she understands:

- the BMI associated risks for herself and her baby during pregnancy, birth and the postnatal period
- the steps she can take to reduce the likelihood of those risks eventuating
- her safe gestational weight gain target for 36 weeks, when a final decision on her safest place to birth will be determined
- the local services available to assist her limit her weight gain
- the local hospital safe BMI and weight limit criteria for maternity service provision
- the likely safest site for her birth and her antenatal care arrangements.

This discussion is to be well documented and the WACHS [Obesity, Bariatric Surgery and Pregnancy Consumer Fact Sheet](#) is available to assist this discussion.

2.2.2 Women who have a BMI of 35 or greater, identified at their first pregnancy visit, are to be commenced on the evidence based [MR73a WACHS Maternity High BMI / Bariatric Surgery Risk Management Tool](#).

2.2.3 Health practitioners are to notify the planned birth site that the woman has been commenced on WACHS Maternity BMI Risk Management Tool so the identified risks and management plan can be accessed from her hospital medical record.

3. 36 week Risk Assessment

At 36 weeks the primary care provider is to undertake an increased BMI and birth risk assessment considering all the individual risks for the woman including:

- her actual weight
- her overall gestational weight gain
- her obstetric or anaesthetic risks – including the outcomes of any consultant Obstetrician and/or Anaesthetist assessment (if BMI > 40)
- the existence of any other co-morbidities,
- the predicted fetal weight from serial ultrasounds, **and**
- any social risks associated with transfer to birth away from family, community and country.

4. History of bariatric surgery

Meta-analysis showed that women who underwent bariatric surgery have reduced rates of

- Gestational Diabetes (GDM),
- all hypertensive disorders (including gestational),
- Large for Gestational Age (LGA) newborns
- Postpartum haemorrhage, and
- Caesarean section.

However they have increased incidence of

- Small for Gestational Age (SGA)
- Intrauterine growth restriction, and
- Preterm births.

There was no difference in rates of preeclampsia, NICU admission, stillbirths, fetal malformations or neonatal death. There is no difference in pregnancy outcomes between restrictive (lap-band /balloon /sleeve) and mal-absorptive (bypass) bariatric surgery.

Visits	Management of previous bariatric surgery	Diagnostics	Recommendation
First antenatal	<ul style="list-style-type: none"> Document date and type of surgery, along with post surgery weight loss Patient education regarding nutrition to prevent vitamin /mineral deficiencies.¹ Assess baseline nutritional status Symptoms of nausea, vomiting, abdominal pain require thorough assessment Gastric band management should be individualised in consultation with bariatric surgeon Consider low dose Aspirin for preeclampsia prevention 	Nutritional status screening for: <ul style="list-style-type: none"> Proteins (albumin, pre-albumin, transferrin) Calcium Iron Vitamins A & B12 Folate HbA1c to exclude type 2 DM 	Women may require additional supplementation during pregnancy including: vitamin B12, iron, folate, vitamin D and calcium. ² Bariatric surgery women may benefit from a daily multivitamin. ³
Second trimester	50% of pregnant women with bypass surgery cannot tolerate GTT because of Dumping syndrome. Some women with restrictive surgery are unable to tolerate the volume of glucose required for a GTT	Alternatives to GTT: <ul style="list-style-type: none"> HbA1c Fasting and postprandial glucose check for 1 week between 24-28 	
Third trimester	<ul style="list-style-type: none"> Fetal growth monitoring Consultation with anaesthetist If patient had extensive abdominal surgery consultation with bariatric surgeon is advised. 	FBC Serial ultrasounds for fetal growth	
Birth planning	Bariatric surgery is not indication for LUSCS and care should be planned according to individual BMI and bodyweight risks		

¹ Michelle A. Kominiarek, MD. Preparing for and Managing a Pregnancy After Bariatric Surgery: Semin Perinatol.2011 December;35(6):356-361.doi:10.1053/j.semperi.2011.05.022.

² The American College of Obstetricians and Gynecologists. Obesity in Pregnancy: Committee Opinion Number 549. 2013

³ Magdaleno R, Pereira BG, Chaim EA, Turato ER. Pregnancy after bariatric surgery: a current view of maternal, obstetrical and perinatal challenges. Archive of Gynecology and Obstetrics. 2012;285:559-66.

Visits	Management of previous bariatric surgery	Diagnostics	Recommendation
Post-partum	<ul style="list-style-type: none"> NSAID should be used with caution during the postpartum period.⁴ The risk of oral contraceptive failure is increased after bariatric surgery. Consider referral to lactation consultant If breastfeeding continue calcium and vitamin D supplementation. Extended-release preparations are not recommended 		<p>Non-oral contraceptives should be considered and balanced against her BMI risks (i.e. Depoprovera)</p> <p>Rapid-release medications are more effective</p>

5. Definitions

BMI	Body Mass Index
FSE	Fetal Scalp Electrode
NSAIDS	Non-steroidal anti-inflammatory drugs
Moderate clinical risk	BMI 35 - 39.9
High clinical risk	BMI ≥ 40

6. Roles and Responsibilities

Primary health provider is to:

- complete an accurate BMI assessment at first pregnancy visit
- commence those at risk from a BMI ≥ 35, or with history of bariatric surgery, on the Maternity High BMI /Bariatric Surgery Risk Management Tool
- advise the intended birth site of the BMI risk management plan when referred for booking (as soon as practical after 20 weeks)
- discuss BMI risks and the BMI risk management plan with woman at first pregnancy visit including:
 - local service weight limit
 - her acceptable weight limit
 - healthy gestational weight gain 5 – 9 kg.
- undertake reassessment of her individual risks at 36 weeks.

⁴ ACOG Guidelines on Pregnancy After Bariatric Surgery

WACHS maternity sites:

- Senior midwifery and medical staff to determine level of service able to be safely provided at their site based on the availability of / access to all relevant resources.
- Sites are to provide education to all maternity care providers on the [MR73A WACHS Site Maternity BMI Risk Assessment and Management Tool](#) and [Obesity, Bariatric Surgery and Pregnancy Consumer Fact Sheet](#) (*Queensland Health have an excellent online learning resource on [Obesity in Pregnancy](#) to support this*).

7. Compliance

Failure to comply with this policy document may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Employment Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (HSA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff is reminded that compliance with policies is mandatory.

8. Evaluation

Audit compliance with this policy and Maternity High BMI / Bariatric Surgery Risk Management Tool annually and report results via Obstetric/Medical advisory committees and ward meetings. Auditable outcomes to include:

- percentage of women with booking BMI >35 whose hospital record shows evidence of use of BMI management tool during pregnancy
- number of women (as a percentage of booked women) transferred during pregnancy to another birth site because of high BMI
- number of unplanned local births to women who were referred to give birth elsewhere
- tabulation of clinical incidents associated with high BMI in pregnancy/birth
- review of birth outcomes for all maternity clients at risk from BMI \geq 35 (this can be obtained via an auto-report from Stork).

Clinical management that varies from the Maternity BMI Risk Management Tool should be reported via the Clinical Incident Monitoring System for senior clinician review.

9. Standards

[National Safety and Quality Healthcare Standards](#) (First edition 2012) – 2.4.1/2, 6.1.1/2/3.

[National Safety and Quality Healthcare Standards](#) (Second edition 2017) – 1.7a, 1.15a and b, 1.27 a and b, 2.10, 5.4 a, b and c, 5.7 a and b, 5.11, 5.13 a and b, 6.11

[EQulPNational Standards](#) (11-15) – 11.5.2, 12.1.1, 12.3.1

10. References

Royal Australian and New Zealand College of Obstetricians and gynaecologists (RANZCOG). [Obesity in Pregnancy](#), C-Obs 49. March 2017.

Maternal and Neonatal Outcomes After Bariatric Surgery; A Systematic Review and Meta-Analysis: Do the benefits outweigh the risks? Wilson Kwong, MD, George Tomlinson, PhD, Denice S. Feig, MD, AJOG, Feb.2018

Sheiner E, Balaban E, Dreiherr J, Levi I, Levy A. Pregnancy outcome in patients following different types of bariatric surgeries. Obesity surgery. 2009 Sep;19(9):1286-92

11. Related Forms

[MR73A WACHS Maternity High BMI / Bariatric Surgery Risk Management Tool](#)

[WACHS Risk Assessment for Admission of the Heavier Patient - Site Assessment Form](#)

[WACHS Safety Risk Report Form](#)

12. Related Policy Documents

[WACHS Risk Assessment for Admission of the Heavier Patient Policy](#)

[WACHS Obesity, Bariatric Surgery and Pregnancy Consumer Fact Sheet](#)

[KEMH Management of a Woman with Increased Body Mass Index](#)

**This document can be made available in alternative formats
on request for a person with a disability**

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