Hampshire Hospitals NHS
NHS Foundation Trust

OBESITY IN PREGNANCY – HH(3)/CL(G)/640/18

Previous document(s) being replaced		
Location	**Document Number**	**Document Name**
Basingstoke	M/11/09	Raised BMI at Booking Guideline and Care of the Obese Pregnant Woman
Winchester		Management of Mothers with High BMI or suspected large for dates babies.

Document Summary		
1. New HHFT Guideline merging past standards 2. Local and electronic consultation January 2013 3. Reviewed by MSGG 19/04/2013 and 21/06/2013. Input from manual handling and anaesthetics 4. Stage 2 Consultation 21/06/13 5. Final Approval Women's Health Governance Forum 26/07/2013 6. New guidance ratified at Maternity Guidelines Group – November 2018		
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Introduction

Rates of overweight and obesity are known to be on the increase within the UK and this includes women of reproductive age. Overall there is a strong correlation between raised BMI and morbidity and mortality; it is now well recognised that the risk of complications during the perinatal period is also increased. MBRRACE (2015) highlighted that 30% of women who died from either direct or indirect causes were obese while 22% were overweight.

MBRRACE's report published in 2017 noted delays to care of morbidly obese women due to a lack of equipment and examples of reluctance to operate due to the likely challenges. Similarly in several instances there were clear technical difficulties–anaesthetic, operative or radiological - solely due to a woman's body habitus. Difficulties in radiological investigations were also noted.

Pregnancy is an opportunity to support women to address lifestyle issues and optimise their own and their baby's health. Planning care in partnership with women who are obese is essential due to the increased rate of obstetric intervention and the need to optimise pregnancy outcome.

Many women do have non eventful pregnancies and births so it is important to bear this in mind. All l women must be treated as individuals and with respect; compassionate and respectful discussions should take place with all women and should not be avoided due to any discomfort on the part of the staff involved.

All women should have a discussion at the beginning of pregnancy relating to normal weight gain, diet and exercise in pregnancy. Reassessment of weight is particularly important for women with raised BMI as this may impact upon birth planning at a later date.
Risks associated with obesity in Pregnancy include.

Early Pregnancy	Miscarriage, fetal anomalies, suboptimal ultrasound imaging
Antenatal	Pregnancy induced hypertension Pre-eclampsia, Gestational diabetes, venous thromboembolism, difficulties with assessing fetal growth using SFH & USS.
Intra partum	Induction of labour, labour dystocia, difficulties with fetal heart monitoring, shoulder dystocia, caesarean section, anaesthetic difficulties, lower rate of VBAC.
Post -partum	Haemorrhage, infection, venous thromboembolism, wound breakdown
Fetal	Macrosomia, IUGR, increased perinatal morbidity and mortality, birth injury, 1.5 times risk of NNU admission

The purpose of this guideline is to offer guidance to Obstetricians and Midwives to help minimise these risks.

Pre conception

Whenever a woman who may become pregnant presents with a BMI≥ 30 within the service pre conceptually including fertility and gynaecology services, she should be provided with proactive pre conception advice. This advice should include information regarding weight loss, healthy lifestyles and commencing folic acid. Women with a BMI 30 kg/m2 or greater wishing to become pregnant should be advised to take 5 mg folic acid supplementation daily, starting at least 1 month before conception and continuing during the first trimester of pregnancy. Obese women are at high risk of vitamin D deficiency. However, although vitamin D supplementation may ensure that women are vitamin D replete, the evidence on whether routine vitamin D should be given to improve maternal and offspring outcomes remains uncertain. There should also be consideration for screening of type 2 Diabetes.

Women of childbearing age with a BMI 30 kg/m2 or greater should receive information and advice about the risks of obesity during pregnancy and childbirth, and be supported to lose weight before conception and between pregnancies in line with National Institute for Health and Care Excellence (NICE) Clinical guideline (CG) 189. Women should be informed that weight loss between pregnancies reduces the risk of stillbirth, hypertensive complications and fetal macrosomia. Weight loss increases the chances of successful vaginal birth after caesarean (VBAC) section.

Women should be signposted to Tommy's 'Planning a Pregnancy tool'
https://www.tommys.org/pregnancy-information/planning-pregnancy/planning-for-pregnancy-tool

Ante natal care

All women should have their height and weight measured and BMI calculated at booking. Women should be weighed on calibrated scales and weight should never be estimated or self-reported. Women with very high weights may need to be weighed within a hospital setting to access scales with the appropriate working range.

The BMI should be explained to the woman and should be recorded in the hand held notes and on the booking form. This will also be calculated at 12 week USS appointment in order to obtain an accurate GROW chart.

BMI = weight (kg)/height (M).

International classification for overweight or obese. (WHO)

BMI 25-29.9	Overweight (not obese)
BMI ≥ 30-34.9	Obese class 1
BMI ≥ 35.0-39.9	Obese class 2
BMI ≥ 40	Obese class 3 morbidly obese.

- **All** women should have a discussion regarding pregnancy weight gain, dietary advice and physical exercise, the contents of which should be recorded in the hand held notes.

- **All** women with a booking BMI ≥30 should be offered referral to a weight management programme.

  eg) Oviva programme:

  → Oviva is a dietetics service provider using technology to improve the way we treat diet related diseases. They deliver intensive intervention programmes tailored to the needs of each individual to achieve gold-standard clinical benefit at lower cost to the healthcare system.
  → Referral form can be found on EMIS/DXS/SYSTEM 1 – see attached
  → A HCP can refer directly to our NHS.NET email address using the form attached (to weightwatchers.awms@nhs.net)
  → A patient can call directly if they are given or see the attached leaflet/poster
  → A patient or HCP can complete a form online via www.weightwatchers.com/uk/hampshire which is sent through to us.

- Folic acid. Women who have a BMI of 30 or higher should be commenced on an increased dose of Folic acid (5mg) for the first trimester as well as 10mcg of Vitamin D throughout pregnancy. The higher dose of folic acid is recommended to address the increased rate of congenital anomaly.
- Blood pressure should be measured using an appropriate sized cuff; this should be recorded in the hand held notes to ensure consistent measurement. Using too small a cuff can artificially inflate the BP reading leading to unnecessary interventions.

- **All** women should have a VTE assessment form completed at booking and this should be updated throughout pregnancy. Central ANC referral to commence thromboprophylaxis should be made if criteria are met.

- Women should be recommended to have a GTT by 28 weeks and the rationale explained.

- **All** women should have SFH plotted on GROW chart from 26 weeks, the accuracy of this may be limited due to the body habitus. Therefore, if BMI at booking is **greater than 35**, a referral should made to the obstetrician to arrange serialised USS assessments of growth and presentation at a minimum of 28 and 36 weeks.

- **All** women should be re-weighed in the third trimester, ideally at 34-36 weeks; this should be clearly documented in the notes. It may be appropriate to offer re-weighing earlier in pregnancy as part of an ongoing discussion regarding weight maintenance, diet and exercise.

Additional care needs by BMI category

BMI 30 – 34.9

- Women who are otherwise low risk can receive midwife led care .

- NICE (2017) recommends that there be an individualised decision with regard to choice of place of birth. Women can choose to birth in any setting and discussion should take into account the woman's preferences as well as her medical, obstetric and pregnancy history.

- Women with a booking BMI of 30-34.9 wishing to use a birth pool for labour and birth within the service should be advised of the criteria for use of the pool and have a gestational weight gain of ≤12kg.

BMI ≥35

- Women should be provided with information leaflet given, in order to provide additional care relating to increased BMI and weight management.

- Women with BMI ≥35 need referral to obstetric clinic for review.

- Women with more than one moderate risk factor at BMI of 35 or greater, may benefit from taking 150 mg aspirin daily from 12 weeks of gestation until birth of the baby.

Additional risk factors include.

- First baby
- >10 years since last baby
- Age >40 at booking
- Family history of pre-eclampsia
- Booking diastolic >80mmHg
- Proteinuria >+1 on more than 1 occasion or 0.3g/24hrs
- Multiple pregnancy
- Other underlying conditions such as diabetes, renal disease, pre-existing hypertension

- Elective induction of labour at term in obese women may reduce the chance of caesarean birth without increasing the risk of adverse outcomes; the option of induction should be discussed with each woman on an individual basis.

- Women with a booking BMI of ≥35 should be advised to birth in an Obstetric unit.

- For those women requesting birth at home or in a low risk birth centre a clinic appointment should be arranged to discuss the associated risks with a member of the senior midwifery or obstetric team and these discussions should be clearly documented in the antenatal notes. Labour line should be informed and community teams made aware of potential risks.

BMI >40

- Referral and ultrasound criteria as per BMI >35

- IOL date should be arranged to maximise delivery on a weekday in daylight hours.

- Women with BMI >50 or >40 with co-morbidities should be referred to an anaesthetist to discuss potential difficulties with venous access and anaesthesia.

- Women with a BMI of ≥40 or weight of 185kg+ (working load for beds) should have plans for equipment preparation /availability and a moving and handling assessment.

Intra-partum care

- For women with obesity in pregnancy, consideration should be given to reweighing women during the third trimester or admission to labour ward to allow appropriate plans to be made for equipment and personnel required during labour and birth.

- Women with a BMI ≥30 should be advised to have active management of third stage labour to reduce the risk of haemorrhage with consideration made for use of additional prophylactic uterotonic agents.

- It is advised that women with BMI ≥35 should have continuous fetal monitoring in active labour and using an FSE if appropriate.

- Women with a booking BMI ≥35 or with booking BMI of between 30 and 34.9 and weight gain in pregnancy of more than 12kg, we do not support the use of the birthing-pool due to potential difficulties with evacuation (refer to 'Use of water for labour and birth' guideline).

- On admission to labour ward women with BMI ≥40 should have venous access established and bloods sent for FBC and G&S.

- When women with BMI>40 are admitted the obstetric and anaesthetic teams must be informed.

- Women with a BMI >40 undergoing LSCS delivery or trial of instrumental must be discussed with the on call Obstetric Consultant.

- Theatre staff should be made aware of women with weight of 125Kg+ and the senior obstetric and anaesthetic teams should be informed. Appropriate manual handing equipment should be obtained in advance where possible.

- Extra vigilance of pressure areas should be undertaken and documented in clinical notes to reduce risk of skin of pressure sores. Supportive advice is available from the tissue viability team if necessary.

Postnatal

- All women should be encouraged to mobilise as soon as is possible post birth. If this is not possible then changes of position should be encouraged and regular inspection of pressure areas should be observed. Tissue viability team should be contacted for advice if needed. Consider Flowtron boots where mobility is impaired.

- Good hydration should be encouraged.

- Further assessment of VTE should be carried out and appropriate dose of LMWH prescribed using most recent weight measurement.

- Extra vigilance of wound sites should be observed and early referral made if infection or breakdown is suspected.

- All women should be given weight management advice in the post natal period with a view to weight reduction.

- Women with raised BMI have lower breastfeeding initiation and continuation rates, these women should be prioritised for support during the ante natal and post natal period both in hospital and community settings, due to the protective factors that breastfeeding offers. Colostrum harvesting should be encouraged by the community midwife in the antenatal period.

- During post-operative recovery, care should be taken when the mother is breastfeeding or providing skin to skin contact in bed due to increased risk of airway obstruction of the infant.

Care of women following bariatric surgery

Pre conception.

- It is advised that women delay pregnancy for approximately 12 months post-surgery as this is the period when rapid weight loss occurs and nutritional deficiencies can arise.
- Folic acid, vitamin B12, calcium and iron supplements should be commenced.

Antenatal Care

- Refer for early obstetric review.
- Consult dietician for advice re nutritional supplements and monitoring of nutritional status.
- Consider glucose monitoring for a week to detect GDM rather that GTT as this can result in dumping syndrome, caused when sugary food is quickly taken into the small intestine causing it to draw water from the rest of the body.
- Arrange serial USS assessment at minimum of 28 and 36 weeks gestation.
- A referral to anaesthetic clinic will only be necessary if they have a current BMI ≥40 or have other needs that may require anaesthetic input.

Intrapartum

Surgery does not increase the likelihood of LSCS and women should follow normal guidelines for care, including obesity guideline if appropriate.

Post partum care.

As per above guideline.

References:

J Hollowell,D Pillas,R Rowe,L Linsell,M Knight, P Brocklehurst (2013) The impact of maternal obesity on intrapartum outcomes in otherwise low risk women: secondary analysis of the Birthplace national prospective cohort study. BJOG, DOI: 10.1111/1471-0528.12437

Khan et al 2013, pregnancy outcome following bariatric surgery, The obstetrician and Gynaecologist, 15, 37-43.

RCOG Green-top Guideline No.72. FC Denison NR Aedla O Keag K Hor RM Reynolds A Milne A Diamond on behalf of the Royal College of Obstetricians and Gynaecologists

NICE 2014, Obesity identification assessment and management, CG 189.

NICE 2017, Intrapartum Care CG190

MBRRACE, 2015, Knight M, Tuffnell D, Kenyon S, Shakespeare J, Gray R, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK. Saving Lives, Improving Mothers' Care - Surveillance of maternal deaths in the UK 2011-13 and lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009-13. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2015.

MBRRACE (2017) Knight M, Nair M, Tuffnell D, Shakespeare J, Kenyon S, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK. Saving Lives, Improving Mothers' Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2013–15. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2017.

Guidance on how to order bariatric equipment can be found on the intranet or in the folder found in each department.

http://trustnet/Departments/Corporate/Occupational-Health/ManualHandling/CoreTechniques/Bariatric/Bariatric%20equipment/default.aspx

Ordering bariatric equipment.

http://trustnet/Departments/Corporate/Occupational-Health/ManualHandling/CoreTechniques/Bariatric/Bariatric%20equipment/default.aspx

Working with Hampshire County Council

weight watchers health solutions

OVIVA

Healthy Weight
in Pregnancy Programme

If you would like to join the service or would like more information, please **speak with your midwife** or call: **0345 602 7068 and quote 'WWRS096'.**

THE SERVICE IS PROVIDED BY **OVIVA** ON BEHALF OF **WEIGHT WATCHERS.**

Personalised advice and coaching to help pregnant women optimise their health during pregnancy under the guidance of a Registered Dietitian

Why do the programme?

Maintaining a healthy weight and avoiding excessive weight gain during pregnancy can mean a healthy lower risk pregnancy and labour, as well as improved longterm health.

- Understand a **healthy balanced diet** for pregnancy
- Create **personalised goals** with your dietitian
- **Control weight gain** during pregnancy and reduce risk of complications
- Optimise your health and discuss **longer-term benefits** of weight loss after you give birth
- Create a **physical activity plan**
- Receive **ongoing weekly support**
- Help with managing your blood sugars if you have **gestational diabetes**

How does it work?

You will have an initial telephone appointment with a dietitian where you will discuss all these topics in detail. This is then followed by 12 weeks of one-to-one coaching with the dietitian.

You can also join Weight Watchers for a free 12-week course after your post-natal examination if you meet the eligibility criteria. For more information visit: **https://www.weightwatchers.com/uk/hampshire**

To join the Healthy Weight in Pregnancy service you must be over 18; live or be registered with a GP practice in Hampshire (excluding Southampton and Portsmouth), and be overweight (BMI ≥25kg/m2)

REFERRAL FORM : Please complete all sections of this form. Fields marked with a * are mandatory.

Patient Information
Patient Name*: (Mrs/Miss/Ms)
Date of Birth*:
E-mail Address:
Home Telephone*:
Mobile Telephone:

Referral and GP Practice Information
Name of Referring Healthcare Professional*:

Reason for Referral

Clinical Information
Weight (kg)*:
Height (cm)*:
BMI (kg/m^2)*:
HbA1c, if Gestational Diabetes (mol/mmol):
Pregnancy Due Date*:
Weeks Pregnant:

Past Medical History / Co-morbidities*

Current Medications*

Once complete please send this form via e-mail to weightwatchers.awms@nhs.net . If you are unsure how to do this or have any other questions, please contact Weight Watchers on 01628 415287.

Programme overview (for the participant)

Eligibility (for the health care professional)

Please check the person is eligible for referral. She should:

- Be aged 18 or over
- Be resident in the administrative county of Hampshire or registered with a Hampshire GP (excluding Southampton or Portsmouth)
- Not have a known eating disorder
- Be pregnant – overweight / gestational diabetes in pregnancy

Below are brief details of the programme you're offering:

- This service has been established to help you manage your weight and prevent excess weight gain in pregnancy. The service is provided by Oviva, on behalf of Weight Watchers.
- You will receive the help and support of a dietician (by telephone or online).
- This support will consist of an initial 40 minute consultation to help you create an action plan that includes healthy eating and physical activity.
- You will be supported over 12 weeks to achieve the goals you have set in your action plan. This individualised support will either be provided by app, or provided via bi-weekly phone calls.
- You will be contacted by telephone 6 and 12 months after the end of the course. This is so that we can find out whether the service helped you to achieve your goals.
- You can join Weight Watchers meetings after your post-natal examination, for a free 12-week course.
- The dieticians are highly experienced in weight management in pregnancy.
- By participating in this service you agree for (anonymised) data about your participation in this programme to be shared between Oviva (the provider of this service), Weight Watchers, NHS and the Commissioner of this service.