Obesity in Pregnancy, Labour and the Puerperium

University Hospitals of Leicester NHS
NHS Trust

C119/2008

"Currently UHL utilises the terms ‘woman’ and ‘women’ within their obstetric and maternity guidelines but these recommendations will also apply to people who do not identify as women but are pregnant or have given birth."

Contents

1. Introduction and who the guideline applies to:

This guideline applies to all members of staff within the Maternity Unit who provide antenatal and peripartum care for women with obesity. This guideline includes a specific antenatal pathway for women with a booking Body Mass Index (BMI) of 40 or more at booking and any women who has undergone Bariatric Surgery prior to pregnancy, even if her booking BMI is less than 40.

Related documents:

Safer Handling Policy - Risk Assessment
Thromboprophylaxis in pregnancy, labour and after vaginal delivery
Diabetes in pregnancy
Booking Process and Risk Assessment in Pregnancy and the Postnatal Period
Caesarean section

What's new?

- If BMI ≥ 50 or weight > 140kgs; refer for Bariatric Assessment at 36-37 weeks.
- Post bariatric surgery section added.
- VTE risk assessment section added
- GTT advice updated to include - Ensure appointment for GTT at 16-18wks for women with a BMI ≥45 (previously ≥40)
- Monitor for pre-eclampsia every 2 weeks from 28 weeks until 36 weeks (previously 3 weekly 24-32 and 2 weekly 32-36) then weekly to birth.
- Delivery at a gestation of 41/40 (latest - due to increased risk of stillbirth) can be considered if BMI ≥40.
- Delivery by 38/40 gestation is likely to be recommended for women with co-morbidities such as pre-existing diabetes and/or hypertension.
- Mode of delivery should be advised by ELCS if there is a significant risk of Emergency CS,
- Offer Continuous CTG monitoring in labour BMI >40

2. Obesity in pregnancy

2.1 Background:

Obesity is the one of the most common medical conditions in women of reproductive age. The prevalence of obesity in women of reproductive age in the UK has markedly increased over the past decades; now affecting between 10-40% women. According to the Royal College of Obstetricians and Gynaecologists[1], 21% of the antenatal population are classified as obese and fewer than half of pregnant women (47%) have a BMI within the normal range. It is known that pregnant women who are obese have greater risk of pregnancy related complications like gestational diabetes, pre-eclampsia and thromboembolic events. There's also an increased risk of caesarean birth and complications of anaesthesia and obstetric interventions. In the latest MBRRACE-UK report (published 2021) 29% of woman who died in the period 2016-18 were obese and a further 26% were overweight. Identifying and managing the risks can improve pregnancy outcomes for women with an increased BMI via the implementation of appropriate plans of care. Furthermore, there are health and safety issues for staff including manual handling, and there is a need for suitable equipment (beds,

operating tables, patient transfer aids, and lithotomy facility, TED stockings, BP monitors cuffs etc.) that will be adequate for women with obesity (see Appendix 1).

2.2 Definitions:

Body Mass Index (BMI) is an index of weight-for-height. It is calculated by the weight in Kilograms divided by the square of the height in metres (kg/m^2).

Maternal Obesity is defined by the World Health Organisation (WHO), 2017, as a Body Mass Index (BMI) of ≥30 Kg / m^2 at the first antenatal consultation.

Classification	BMI kg/m^2
Normal Weight	18.5-24.9
Overweight	25-29.9
Obese Class I	30-34.9
Obese Class II	35-39.9
Obese Class III	≥ 40

2.3 Risks associated with maternal obesity (BMI ≥ 30 kg/m^2):

Antenatal	Intrapartum	Postpartum	Anaesthetic
Increased risk of Gestational or Type 2 Diabetes Increased risk of Hypertension/Pre-Eclampsia Increased risk of Thromboembolism Increased risk of Anxiety or Depression (up to 20%) Increased risk of Fetal loss (miscarriage and Stillbirth: 2-3 fold) Increased risk of Fetal growth disorders (both growth restriction and macrosomia) Increased risk of fetal anomalies especially neural tube defects Difficult ultrasound diagnosis of fetal anomalies	Difficulties monitoring fetal heart Increased risk of failed IOL or slow progress in labour Increased risk of failed VBAC Increased risk of operative delivery or CS Increased risk of Shoulder dystocia Higher morbidity and mortality with technically difficult CS and management of increased risk of complications	**Maternal** Postpartum Haemorrhage Thromboembolism Wound complications Sleep apnoea **Fetal** Admission of baby to Neonatal Unit Stillbirth Neonatal death Increased risk childhood obesity and cardiovascular disease in offspring	Difficulty siting regional block, less predictable spread of local anaesthetic Difficult airway/ intubations Difficult to oxygenate due to increased intra-abdominal pressure Aspiration Non-invasive BP monitoring unreliable in morbid obesity Need for high dependency care postoperatively

2.4 The Health & Wellbeing Care Team

The Care Team consists of a named Consultant Obstetrician and Specialist Midwives.

Please refer the following women to the Health and Wellbeing Clinic;

- **Women with BMI ≥ 40, or**
- **Women who have undergone Bariatric Surgery**

3. Care for women with Obesity

Planning of care for women with obesity in pregnancy is essential. It is important that all women are given respect and treated as an individual; all issues related to pregnancy and obesity need to be discussed with compassion and respect, but must not be neglected due to discomfort on part of the staff involved.

Women should be made aware of the risks associated with a raised BMI in pregnancy and the planned management strategies to minimise these risks.
All aspects of management of care - antenatal, intrapartum and postnatal, should be discussed with the woman early in pregnancy and clearly documented in the maternity hand held records.

3.1 Pre Conception

- Where a woman with a BMI ≥ 30 presents to the service pre-conceptually, information should be provided about risks associated with her pregnancy in this circumstance.
- Women with obesity may present to infertility services seeking advice or to Gynaecology Services with early pregnancy complications resulting in fetal loss. This opportunity should be taken to discuss the risks inherent in obesity, and the woman should be advised to defer (a further) pregnancy until a healthier weight has been achieved.
- A referral to a dietician should be offered if the service is available.
- All women should be advised to take pre-conceptual Folic Acid; women with Class I Obesity (BMI >30) should be advised to take the higher 5mg dosage.

3.2 Pregnancy Booking

Measure weight and height to calculate BMI and document in the handheld and electronic healthcare record. Offer information on the risks associated with obesity and pregnancy and document. Discuss and document healthy diet and exercise in pregnancy. See UHL leaflet “High Body Mass Index (BMI) and Pregnancy” available on YourHealth website.

Women with a BMI 30-35 kg/m2 can be booked at present for midwifery led care unless other obstetric/medical/anaesthetic risk factors are present.

Measure and document BP. If uncertainty regarding size of cuff required, measure upper arm at mid-point circumference and use the appropriate size cuff (Adult 27-34 cm, Large adult 34-43 cm and XL 34-43 cm). Please document cuff size (RCOG 2018).

3.3 Nutrient Requirements for Pregnancy

Supplement	Normal dose	Dose for BMI>30
Folic Acid	400mcg	5mg daily until 12/40 (BMI>30 / pre-existing DM)
Calcium	1000-1200mg	1300-1500mg/d
Vitamin D	400-800iu/d	
Iron	45-600 elemental iron/d	
Vitamin B12		4mcg/d every 3 months if deficient or have undergone bariatric surgery
Vitamin K	60mcg/d	
Protein	60g/d in balanced diet	
Thiamine	12mg/d	

Commence the above and following recommended medications or supplements via the GP:

- Aspirin 150mg {12 until 36 weeks} for women with BMI ≥35 and more than one risk factor for pre-eclampsia as per Aspirin in Pregnancy UHL Obstetric Guideline C36/2011

3.4 VTE Risk assessment

Perform VTE Risk Assessment at booking (and repeat at 28/40) to establish requirements for Low-Molecular Weight Heparin (LMWH) thromboprophylaxis;

- VTE score ≥4 => AN LMWH from first trimester + PN for 6 weeks
- VTE score ≥3 => AN LMWH from 28/40 + PN for 6 weeks
- VTE score ≥2 => PN ≥ LMWH for 7 days Thromboprophylaxis in Pregnancy Labour and Vaginal Delivery UHL Obstetric Guideline.pdf
- LMWH administration during every antenatal hospital admission

3.5 Moving and handling assessment

- If booking BMI is ≥40, the community midwife will conduct an assessment either virtually or face to face for moving and handling requirements in labour at around 36/40. Some women with a booking BMI<40 may also benefit from assessment of moving and handling requirements in the third trimester. This should be decided on an individual basis. If support is needed to complete the assessment, please contact the health and wellbeing team.

3.6 Health & Wellbeing Antenatal Care

Specialist Midwife Virtual Consultation at 14-16 weeks:

- Discuss and document healthy eating and safe exercise in pregnancy.
- Discuss healthy weight gain in pregnancy (maximum recommended 5-9kg) +/- Referral to Weight Management Programme (Opt-out scheme for County women only).
- Re-discuss raised BMI in pregnancy risk factors; specifically HTN, GDM, VTE.
- Ensure appointment for GTT at 16-18wks for women with a BMI ≥45 and repeat/offer at 26-28wks for ALL women with a BMI >30 at booking

**NB: VBG + HbA1C for women who have had Bariatric surgery*

- Commence on GROW pathway with serial scans at 32/36/40 weeks gestation for all women with a BMI ≥35kg/m^2.
- Refer for anaesthetic assessment at 30+ weeks; plan will be documented on the electronic maternity records.
- If BMI ≥ 50 or weight > 140kgs; refer for Bariatric Assessment at 36-37 weeks. This must be a documented assessment by an appropriate member of staff or a member of the Manual Handling Team to determine the need for additional equipment or any manual handling requirements in all care settings (see Appendix 1 for equipment availability).
- Recommend community midwife monitor for pre-eclampsia every 2 weeks from 28 weeks until 36 weeks, and then weekly until birth.
- Re-review thromboprophylaxis risk at 28/40 and commence LMWH if required.

Obstetrician Consultation at 36-37 weeks:

- Consultant review for final delivery planning.
- If women are under additional ANC teams e.g. DM/HTN then this appointment is not required as the delivery planning can be done in those specialist clinics. The exception is for women with a BMI ≥ 50 as bariatric risk assessment is required.

3.6.1 Delivery Planning (BMI ≥40)

GESTATION

- Delivery at a gestation of 41/40 (latest - due to increased risk of stillbirth) can be considered for women with no other co-morbidities or maternal or fetal concerns in pregnancy. This can be either by Induction of Labour (IOL) or by Elective Caesarean Section (ELCS)
- Delivery by 38/40 gestation is likely to be recommended for women with co-morbidities such as pre-existing diabetes and/or hypertension.

MODE

- Mode of delivery should be advised by ELCS if there is a significant risk of Emergency CS, especially with GA, as this may be challenging to achieve safely in women with BMI ≥40 (e.g. women without diabetes with baby EFW ≥5kg).

- Obesity is a recognised risk factor for failed VBAC; women with previous CS requesting VBAC should be discussed with the named lead Consultant and their care individualised. Caution should be exercised when considering IOL for these women due to a higher risk of failure with increased operative and anaesthetic risks.

- In some women it may be necessary for more than one senior Anaesthetist and senior Obstetrician to attend for operative delivery; under these circumstances it may not be considered appropriate for the woman to undergo an emergency CS until all personnel are present, even if this will have an adverse impact on the fetus. Where this applies, it should be discussed antenatally with the patient and clearly documented in the Intrapartum Care Plan.

- Information regarding BMI should be highlighted and documented in the booking system when arranging IOL or ELCS to notify midwifery, obstetric, anaesthetic, and theatre teams. Any special pre-arranged equipment (special bed, theatre table, and manual handling equipment) should also be indicated in the notes.

4. Bariatric Surgery

Bariatric surgery is becoming increasingly performed prior to pregnancy for women with raised BMI; thus, there is a larger population of bariatric pregnant patients presenting to obstetric units. Many have unplanned pregnancies due to rapid return to fertility with initial weight loss. In the UK >20,000 bariatric surgical procedures were performed between 2012-2016. Eligibility for undergoing bariatric surgery includes individuals with BMI ≥40 or BMI ≥30 who have co-morbidities such as diabetes or hypertension. The main types of bariatric surgery include Bypass, Band and Sleeve. Bariatric patients need specialised care throughout pregnancy, intrapartum and the postnatal period to manage their increased risks. However, there is no international consensus on the management of pregnancy after bariatric surgery.

Benefits for pregnancy in women following bariatric surgery include a reduced risk of gestational diabetes and hypertension and also a reduction in risk of preterm birth. However, there are further risks in pregnancy for women embarking on pregnancy after bariatric surgery (See below).

4.1 Additional Risks in Pregnancy after Bariatric Surgery:

Increased risk of maternal micronutrient deficiencies, Iron or B12 deficiency anaemia, complex psychological issues, surgical complications
Increased risk of Fetal anomalies, especially NTD
Increased risk of SGA (due to malabsorption of micronutrients)
Increased risk of Preterm Birth

Increased risk of Perinatal Mortality

The recommendation is to avoid pregnancy for 12-24 months following any Bariatric surgical procedure. Women are advised to use Long Acting Reversible Contraception (LARC), such as the intrauterine coil or implant; oral contraceptives are less effective due to malabsorption.

4.2 Additional Booking Blood Tests only if undergone Bariatric Surgery

- Haematinics (Ferritin, Folate, Vitamin B12)*
- LFTs, U&Es, Vitamin A, B, D each trimester

*If refractory iron-deficiency anaemia after Bariatric Surgery; consider Parenteral iron.

5. Intrapartum Care

All women on admission **must** have an assessment to consider tissue viability issues. This should be documented on the Waterlow risk assessment form. This is particularly important for women BMI ≥ 35. All women with a Waterlow Score of medium risk (10 – 14) or higher should have their skin inspected daily using the BEST SHOT guidance in Appendix 2. The UHL Prevention of Pressure Ulcer Care Plan (PUP) should be used to document the regime of care. Any medium and high-risk women should be notified to the tissue viability team.

All women, including primiparous booking with a BMI 35 to less than 40 and otherwise low risk can now have the choice of an alongside birthing centre as place of birth (NICE 2019, Rowe 2018). Here they will be offered intermittent auscultation. If there is difficulty with this they can then be offered electronic fetal monitoring in the Consultant Unit.

All women with a BMI ≥40 should be advised to deliver in a Consultant Led Unit.

Senior Obstetric and Anaesthetic staff and Core Midwife should be informed and review this group on admission and during each ward round.

Recommendations women planning a Vaginal Birth

- Continuous CTG monitoring in labour BMI >40
- Early venous access
- Scan on admission in labour if concern about presentation
- Inform Anaesthetic team upon arrival to Delivery Suite
- Early consideration for Antacid prophylaxis
- Early consideration for Regional Anaesthesia
- Active management of third stage (PPH risk assessment in labour)

- Alert theatre staff regarding any woman whose weight exceeds 140kg who requires operative intervention in theatre

Considerations for women undergoing an Instrumental delivery or CS

- If CS or Rotational Instrumental Delivery is required it should be performed by an experienced Obstetrician (ST6 or above); a low threshold for performing Instrumental deliveries as a 'Trial' in theatre is required, due to the higher failure rate

- Consideration of specialist devices and equipment including Alexis O self-retaining retractor and/or TRAXI (if BMI ≥ 50) to minimise operator strain

- Incision site (Pfannenstiel vs. Supra/Sub-umbilicus)

- Consider prophylactic IV antibiotics (consider increased dosage) for 24 hours post-delivery due to increased risk of poor wound healing and breakdown caesarean section

- Recommend active management of third stage; consider IV rather than IM Oxytocin after assessment of body shape

- Adaptation to suture materials on the sheath and skin closure to minimise risk of infection/collections.

- Wound care related to perineum or abdominal wound (consider negative pressure wound therapy if BMI ≥40)

Postnatal Care

- All women with obesity in pregnancy should have early mobilisation if possible

- Use compression stockings with two or more additional risk factors

- Commence postnatal Thromboprophylaxis for seven days if one or more additional risk factors for thromboembolism are present (see Thromboprophylaxis guideline); all women with BMI ≥ 40 should be offered postnatal Thromboprophylaxis for seven days regardless of their mode of delivery

- All women with a Waterlow score of medium risk (10 – 14) or higher should have their skin inspected daily using the BEST SHOT guidance in Appendix 2; the UHL Prevention of Pressure Ulcer Care Plan (PUP) should be used to document the regime of care

- Inform women the importance of perineal hygiene including frequent changes of sanitary pads, washing hands before and after and daily bathing or showers

- Prior to postnatal discharge from hospital, women with obesity should receive future pregnancy advice;

- Discuss the long-term risks of obesity, such as hypertension and diabetes

- Discuss and plan targets for postnatal weight loss and signpost to GP services as appropriate

- Discuss contraception plans {NB. for women following any bariatric surgery, the OCP cannot be absorbed, so need to specifically discuss LARC options for contraception}

Infant feeding

Breastfeeding should be encouraged. Aim to discuss barriers to breastfeeding in women with raised BMI including a limited breastfeeding culture, limited high quality support, large breast size and concerns for breastfeeding in public. Also discuss the enablers to help support women who choose to breastfeed, namely a supportive partner, recommend breastfeeding friendly networks, lactation consultants and breastfeeding aides, for example pillows. Breastfeeding halves the risk of T2DM in the mother, especially with increased time of breastfeeding, and reduces the risk of childhood obesity in the offspring.

6. Antenatal Pathway for Women with BMI ≥30 or after Bariatric Surgery

BMI ≥30

- Vitamin D 1000iu
- Folic acid 5mg OD to 12/40
- GTT 26-28/40
- Explain risks in AN/IP/PN and highlight High BMI leaflet
- Refer to Healthy Weight Management clinic (if county area)
- Start Asprin if indicated as per guideline
- VTE score at booking and at 28/40
    - Fragmin from booking and 6/52 PN if VTE >4
    - Fragmin from 28wks and 6/52 PN if VTE >3

At 36 week AN check and confirm birth plan, discuss PN follow up for LMWH/contraception and weight loss

Women with BMI 30-35 can be Midwifery led (alongside BC) if no other risk factors present.

BMI ≥35

As above and additional listed;

- Ultrasound scans 32/36/Term
- Consider Aspirin 150mg OD from 12/40 if >1 other risk factor present
- Note - increased risks with VBAC and IOL with higher BMI

Women with BMI 35-40 have choice of alongside Birth Centre and intermittent monitoring if otherwise low risk. For CTG if auscultation difficult.

BMI ≥40

As above and additional listed;

- Refer to Consultant Health & Wellbeing clinic

- AN apt at 24-25/40 weeks including multips
- 2 weekly from 28/40, weekly from 36/40
- Anaesthetic review 32+/40
- 36/40 Specialist and Consultant Clinic appointment for birth planning
- Reweight and moving and handling in labour risk assessment by CMW at 36/40
- Women to be aware that CTG monitoring and IV access is recommended in labour
- 41/40 IOL or ELCS if no other plan i.e. GDM 38/40
  - Fragmin 7 days PN regardless of mode of delivery

BMI ≥45

As above and additional listed;

- For early 16wk GTT and Manual Handling Assessment in Health &Wellbeing Clinic (face to face appointment)

BMI ≥ 50

As above and additional listed;

- Bariatric assessment

Bariatric surgery

Follow the schedule specific to booking BMI plus additional screening:

- Booking bloods + Ferritin, Folate, Vit B12, A, B, D. LFT, U&E
- 28/40 routine bloods + LFT, U&E, Vit A, B, D
- 36/40 FBC, LFT, U&E, Vit A, B, D

10. Education and Training:

None

11. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
VTE assessment at 28 weeks gestation for all women with a BMI of 40 or over	Antenatal records	Public health maternity lead	yearly	Audit group/maternity governance.
All women with BMI of 40 or over will have an anaesthetic review	Antenatal records	Public health maternity lead	yearly	Audit group/maternity governance
All women with BMI of 35-40 multiparous with no complications will be offered the choice of the alongside birth centres	Antenatal records	Matron-community maternity services	yearly	Audit group/maternity governance

12. Supporting References:

1. Dennison FC Aedla et all (2018) On behalf of Royal College of obstetricians and gynaecologists Care of women with obesity in pregnancy Green top Guideline No 72 BJOG 2018
2. Modder J, Fitzsimmons K J. (2010) CMACE /RCOG Joint Guideline Management of Women with Obesity in Pregnancy.
3. NICE (2019) Intrapartum care for women with existing medical conditions or obstetric complications and their babies. Evidence reviews for obesity NH121 March 2019
4. NICE clinical guideline No 55: Intrapartum Care for healthy women and their babies. NICE Sept 2007
5. Management of the Obese Maternity Woman Guideline, The Royal Women's Hospital, Victoria, Australia http://www.thewomens.org.au/ObeseMaternityWomanManagement (accessed 15 July 2008)
6. Pregnant women with a raised BMI Best practice standards of care June 2015 East Midlands Maternity Network
7. Rowe R Knight M et al (2018) Outcomes for women with BMI >35kg/m2 admitted for labour care to alongside midwifery units in the UK. A national prospective cohort study using the UK Midwifery Study System (UKMisSS)
8. Informing the Future: Critical Issues in Health, Fifth Edition. Washington, DC: The National Academies Press. Meeting the Unique Health Needs of Women and Children https://nap.nationalacademies.org/download/12709

13. Keywords:

Obesity, Pregnancy, BMI, Bariatric

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

Contact and review details	
Guideline Lead (Name and Title) Author: A Akkad , Consultant obstetrician August 2008 **Reviewed and updated by: Miss Karen Moores, Consultant Obstetrician & B Cowlishaw – Specialist midwife in public health & inclusion**	**Executive Lead** Chief Nurse

Details of Changes made during review:

Update to moving and handling assessment, plus information regarding bariatric specialist equipment and assessment form included in the appendix.
If BMI ≥ 50 or weight > 140kgs; refer for Bariatric Assessment at 36-37 weeks.
Post bariatric surgery section added
Details of health & wellbeing clinic role and A/N schedule added
Updated nutrients in pregnancy table
Increased risk childhood obesity and cardiovascular disease in offspring added to risks associated
VTE risk assessment section added
GTT advice updated to include - Ensure appointment for GTT at 16-18wks for women with a BMI ≥45 (previously ≥40) and repeat/offer at 26-28wks for ALL women with a BMI >30 at booking

Monitor for pre-eclampsia every 2 weeks from 28 weeks until 36 weeks (previously 3 weekly 24-32 and 2 weekly 32-36) then weekly to birth.

Delivery at a gestation of 41/40 (latest - due to increased risk of stillbirth) can be considered for women with no other co-morbidities or maternal or fetal concerns in pregnancy. This can be either by Induction of Labour (IOL) or by Elective Caesarean Section (ELCS)

Delivery by 38/40 gestation is likely to be recommended for women with co-morbidities such as pre-existing diabetes and/or hypertension.

Mode of delivery should be advised by ELCS if there is a significant risk of Emergency CS, especially with GA, as this may be challenging to achieve safely in women with BMI ≥40 (e.g. women without diabetes with baby EFW ≥5kg).

Offer Continuous CTG monitoring in labour BMI >40

A/N schedule updated

V3.1 – Feb 2023
Amended aspirin advice
Updated A/N schedule – 2 weekly from 28/40 and weekly from 36/40 for BMI ≥40
IOL at 41/40 for BMI ≥40
36/40 bloods are for women that have had gastric band surgery only.
V 4 – April 2023
Updated by T Dring (RM) & B Cowlishaw (Public Health Midwife)
Amended AN schedule presentation format to simplify use
V5 – June 2024
Updated vitamin K supplementation in line with new guidance, removed; 1000iu/d Booking until delivery; continue if breastfeeding. Now to offer standard dose recommendations

APPENDIX 1: Equipment

AVAILABLE EQUIPMENT
(max. weight capacity)

FOR BARIATRIC PATIENTS WITHIN WOMENS & PERINATAL SERVICES

If equipment required – call Bleep Holder if urgent or email manual handling mailbox

HillRom Electric Profiling Bed 210 kg
The bed is available on all wards. Contact Manual Handling Service or Duty Manager for patients over 210kg

Orange XXL chairs seat width 70cm 254 kg
Available at LRI on Ward 1, 5 or 6
Wheels on the rear legs to move unoccupied chair

Green XL chairs seat width 60cm 254 kg
Available at LGH on Ward 30, 31 and ANC
Wheels on the rear legs to move unoccupied chair

PAT slide (over a 15cm gap) 200 kg

Delivery Suite theatre table 300 kg

Liko Viking M hoist with scales 200 kg
Available on Ward 30 LGH and Ward 1 LRI

XL and XXL hoist sling. Contact Manual Handling Service who are usually available during office hours. This is difficult out of hours because if we leave it with the hoist it may be used for another patient

Step on scales
Available in Pregnancy Assessment Service LGH and Antenatal Clinic LRI 250 kg

XXL gowns available from Linen Rooms

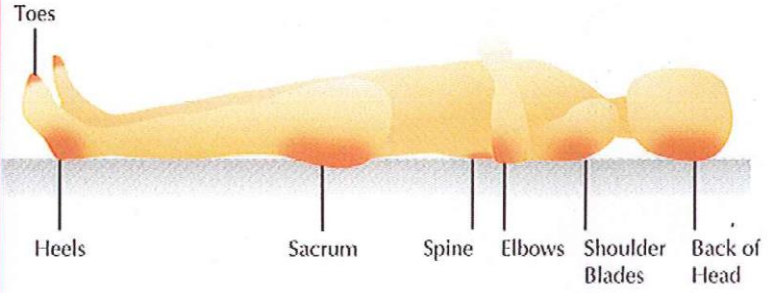
Appendix 2: BEST SHOT

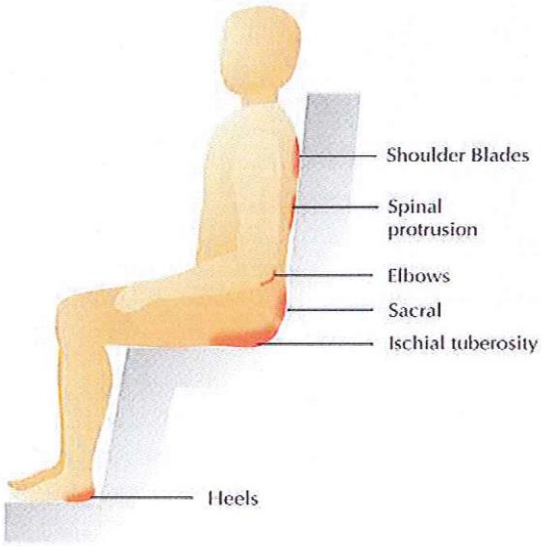
University Hospitals of Leicester NHS Trust – Tissue Viability Service

Skin Inspectors

Have you checked your patient's most vulnerable pressure areas today?

Take your BEST SHOT!





B – **BUTTOCKS**

E – **ELBOWS/EARS**

S – **SACRUM (bottom)**

T – **TROCHANTERS (hips)**

S – **SPINE/ SHOULDERS**

H – **HEELS**

O – **OCCIPITAL AREA (back of the head)**

T – **TOES**

What to look and feel for?

- **Redness/** erythema - non-blanching when finger pressure applied
- **Pain**, soreness
- **Warmer** or **cooler** area over bony prominence
- **Boggy** feeling
- **Hardened** area
- **Discolouration** – dark red, purple, black
- **Broken skin/** ulcer

N.B. Document any changes & continue to monitor closely!!!

J.D. 27/09/10

Maternity Manual Handling Assessment						
Patient Addressograph			Date: Height : Weight : BMI:		University Hospitals of Leicester NHS NHS Trust	
	One Point (Green)	Score	Two Points (Amber)	Score	Three Points (Red)	Score
Degree of independent movement (Able to make major & frequent changes in position without assistance)	Able to reposition self		Requires some assistance to reposition self		Unable to reposition self	
Co-operation, understanding & implementation of carer instructions	Able to understand and implement instructions		Able to understand but only partly able to co-operate		Unable to understand co-operate or implement instructions	
Height	160cm – 178cm		<160cm		Taller than 183cm	
Weight	<120Kg (<19 stone)		120 - 200Kg (19 – 30 stone)		>200Kg (>30 stone)	
Shape	Proportional		Apple 		Pear 	
Skin integrity (use validated scale to support clinical judgement - maternity adapted Waterlow score)	Intact (no visible marking)		Grade 1, 2		Grade 3, 4	
Tolerance to be hoisted	Yes		Caution		No	
Frequency of movement	Able to move self freely		Requires some support in moving		Requires frequent support for movements	
Constraints of movement	None		Limited (pain, equipment)		Dependent (weakness, skin lesions)	
Additional risks: Epilepsy, Co-morbidities	None		Medium (1-2 co-morbidities)		High (>2 co-morbidities)	
	Sub-total:		Sub-total:		Sub-total:	
Total Score:					Assessors Name (Print):	
Care Plan:					Signature:	

10 - 15	Care Plan 1 (Green)	This person is generally independent and may not need assistance but will require a bed to support weight and shape
15 - 19	Care Plan 2 (Amber)	This person may need assistance of two or more midwives and will require further equipment to facilitate safe care
>20	Care Plan 3 (Red)	The person must be cared for in a specialist bariatric bed that will support the weight and further equipment will be required. A further assessment by a moving and handling advisor is required.

H Archer PHE specialist midwife George Elliot Hospital NHS 2022 – with permission