

# Guidelines for the Care of Bariatric Patients

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<b>Contents Page</b>	<b>Page No</b>
1. Introduction	4
2. Implementation of Policy and Guidelines	4
3. Risk assessments	5
3.1 Review	5
3.2 Assessment by managers	5
4. Elective admissions	5
5. Emergency admissions	6
Flow chart	7
6. Inter-departmental Transfers	8
7. Discharge	8
8. Deceased Patient	9
9. Airway, Breathing, Circulation	9
10. Resuscitation of a Bariatric patient	10
11. Equipment	11
11.1 SWL & Space constraints	11
11.2 Beds, mattresses and manoeuvres	11
11.3 Trolley	12
11.4 Hoist & Slings	12
11.5 Chairs	13
11.6 Wheelchairs	13
12. Patient Care	14
12.1 How to weigh a Bariatric patient	14
12.2 Patient mobility	15
12.3 Personal Care	16
12.4 Eating and drinking	18
12.5 Clothing	18
12.6 Fallen Patient	18
12.7 Psychological needs	19
13. Staffing levels	19

14. Summary	19
15. References	20, 21, 22
Appendix I Explanation of morbid obesity	23
Appendix II Current Equipment	24
Appendix III Hire Companies	25
Appendix IV Staffing levels	25

## 1. INTRODUCTION

Obese patients (Appendix I) may not present until late in the course of their illness due to mobility and transportation problems, sedentary life-styles and depression. It often takes a great deal of effort to present with a problem as they may feel embarrassed and sometimes they are aware of a resentment from medical staff because of their size and the problems that surround the issue. Trimble (1996).

Assessment is the first step, it identifies goals, equipment needs and care packages that meet both the individual and the staff involved which improves functional capability. Rush (2005).

Assessing a morbidly obese patients care needs should include detailed information on independence, mobility, activities of daily living (ADL'S) which includes Airway, Breathing, circulation, dignity and the equipment requirement.

## 2. IMPLEMENTATION OF POLICY AND GUIDELINES

Bariatric Patients whose needs are not met by existing equipment in Trust.

If an estimated weight is given or if there is any doubt about the weight of the patient

If the Body Mass Index (BMI) is class 2 (BMI 35-40), morbidly obese (BMI >40) or Patients weight is over 152kgs (24stone).

The Trust has purchased equipment (see Appendix II) which is suitable for managing 'Bariatric patients' during the hospital stay. It is available on loan to all wards/departments, on request.

To access contact the Manual Handling Department during office hours on 8248 or the Out of Hours sight manager.

In exceptional circumstances, specialist bariatric equipment may need to be hired in. Since this will be costed to departmental budgets, this will only be done at the discretion of the Directorate General Manager

These Guidelines should be read in conjunction with:

- Admission, Transfer and Discharge Policy and Guidelines
- Care of the Bariatric patient policy
- Health care documentation
- Patient Risk Assessment
- Manual Handling Policy

### **3. RISK ASSESSMENTS**

On admission a manual handling risk assessment needs to be completed and documented by a competent person in accordance to the Trust policy.

See Universal Assessment Documentation

As well as these, specific factors of a Bariatric patient also to be considered are:

- Weight
- Height
- Body Mass Index (BMI)
- Manual handling requirements, including ability to weight bear, transfer, movements in bed etc
- Manual handling equipment including bed, seating, hoist, commode etc
- Number of staff required
- Techniques to be used

#### **3.1 REVIEW**

Review risk assessments/plans of care daily or as and when necessary.

#### **3.2 ASSESSMENT BY MANAGERS**

All managers must assess their departments to ascertain whether adequate provision has been made to meet the handling needs of the bariatric patient.

Heavy duty equipment will safeguard the health and safety of staff and promote the bariatric patients independence.

### **4. ELECTIVE ADMISSIONS**

See Admission, Transfer and Discharge Policy and Guidelines.

If a planned admission meets the criteria for implementation of the guidelines and the Care of the Bariatric patient policy then appropriate preparations can be made at this stage.

Minimum 5 days notice and detailed information of a patient's manual handling needs should be obtained from the referring clinic/GP/ward.

On completion of the Elective admission assessment, equipment such as a bed, hoist, commode, wheelchair, walking frame and slide sheets must be made available where a need is identified. Equipment that is not available in the ward/ dept. should be borrowed by contacting the Manual Handling Department on 8248. Hiring equipment from outside agencies might be recommended.

If Patient criteria unknown, then the Policy and guidelines need to be initiated on arrival to the ward as an emergency admission.

## **5. EMERGENCY ADMISSIONS**

See Admission, Transfer and Discharge Policy and Guidelines.

If the emergency admission meets the criteria for implementation of the guidelines and the Care of the Bariatric patient policy then appropriate preparations can be made by the Accident and Emergency Department as soon as is reasonably practicable.

As soon as possible the Out of hours site manager or bed bureau to be informed, so that they can agree admission to ward and arrange equipment/aids. (Appendix II & III)

Inform Ward/ Departmental Managers, as soon as possible, to prepare for patient admission with sufficient staff and make sure equipment available/ suitable (Appendix II & III & IV)

Inform Manual Handling Department on Extension 8248.

On completion of the assessment, equipment such as a bed, hoist, commode, wheelchair, walking frame and slide sheets must be made available where a need is identified. Equipment that is not available in the ward/ dept. should be borrowed by contacting the Manual Handling Department on 8248. Hiring equipment from outside agencies might be recommended.

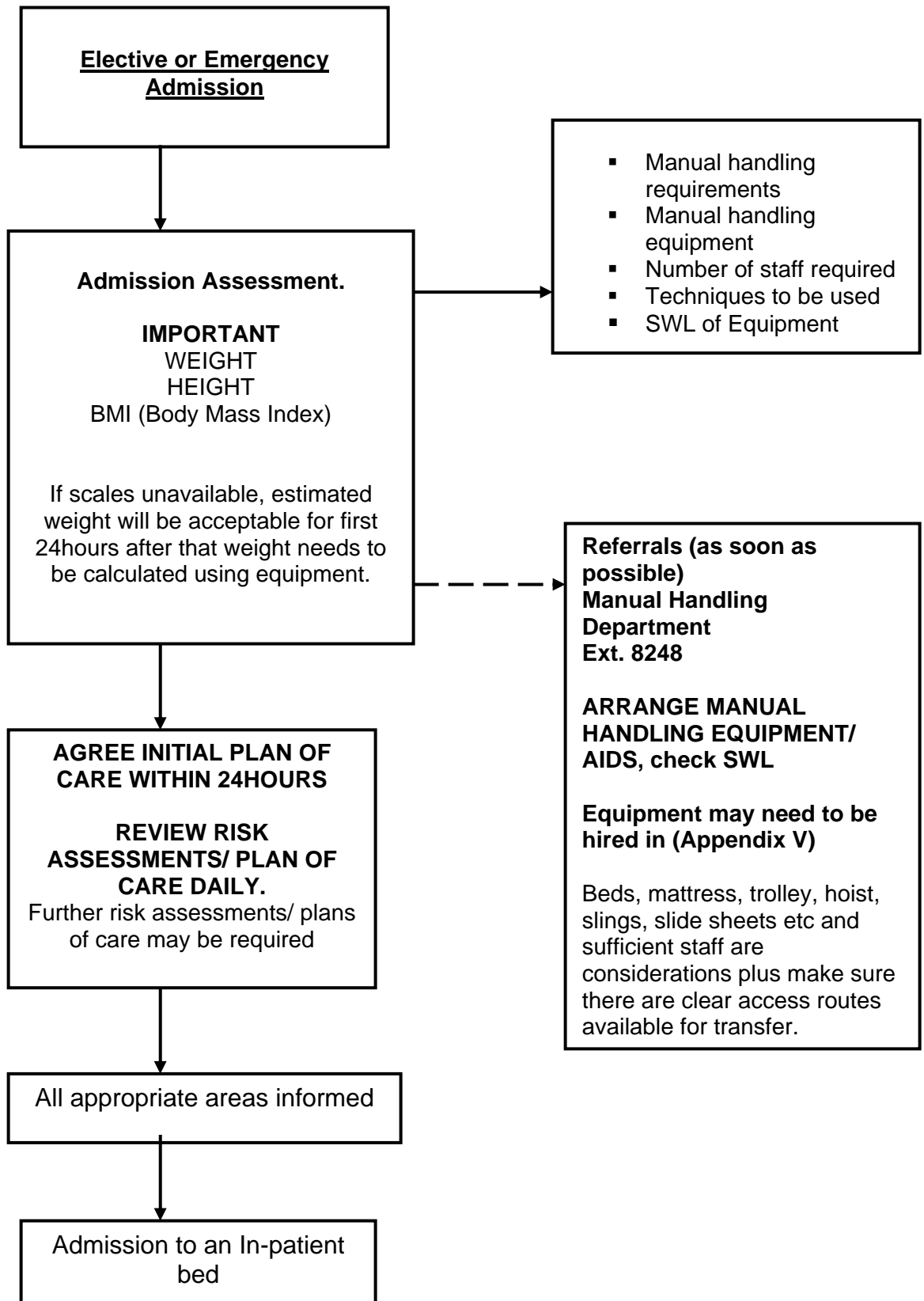
Use Admission Pathway flow chart for both Elective and Emergency admission in Admission, Transfer and Discharge Policy and Guidelines, in conjunction with the flow chart described over in the management process of a Bariatric patient.

### **Elective and Emergency Admission.**

See Admission Pathway flow chart in:

“Admission, Transfer & Discharge Policy & Guidelines.”

For a more in-depth management process for the Bariatric Patient also include the following flow chart.



## 6. INTER-DEPARTMENTAL TRANSFERS

See Admission, Transfer and Discharge Policy and Guidelines, also

- When a Bariatric patient requires treatment in another department, detailed information on the patients weight and handling needs must be given to that department before hand. Ensure appropriate equipment, i.e. Bed, trolley, hoist, sling, slide sheets and techniques and staff. With clear access for transfer.
- The receiving department must check the SWL of trolleys/ tables. Where appropriate, the procedure should be carried out on the specialised bed or other suitable equipment to maintain patient and staff safety.
- Where this is not possible, and the patient's weight exceeds the SWL of the department's equipment, a heavy duty table/ trolley must be hired. Advice and information is available via Manual Handling Department.
- When a patient is transferred to another ward, a detailed report on the patient's weight and moving and handling needs must be given to the receiving ward as soon as possible.
- The ward must be given time to pre-plan and arrange for appropriate equipment, where circumstances allow.
- Ambulance control must be given full details of the patient's weight and handling needs if transferred to another hospital.
- A full moving and handling care plan must accompany the patient on transfer.

## 7. DISCHARGE

See Admission, Transfer and Discharge Policy and Guidelines, also

Contact:

- community team so they have time to organise appropriate equipment/ aids such as wheelchairs, hoist, beds etc
- Transport requirements and SWL of transportation
- Return hired equipment **immediately** after patient has been discharged.
- All equipment must be cleaned, according to the Trust Disinfection Policy and manufacturer's instruction, before it is returned.

## 8. DESEASED PATIENT

- Following the death of a bariatric patient, the ward must notify the portering and during office hours the mortuary staff of the patient's weight, before the preparation of the body. This will allow time to prepare for the transfer with sufficient staff to move the body.
- Transport to the mortuary on appropriate equipment, this may include the heavy duty bed. The bed must be moved using **four** portering staff to minimise the risk of injury.
- When the patient is being transferred to the mortuary to ensure patient dignity in public areas and access should be closed to the public. If this is not possible the patient may require wearing an oxygen mask with a nurse to escort them so as not to draw attention from the public to the demise of the patient.
- The mortuary has facilities for obese bodies. Fridge number 1, 2 and 3 can take a weight up to 45 stone (286kg). Should porters encounter any difficulties please contact the mortuary staff.
- If a post mortem is necessary, make sure all surfaces are able to support weight of the deceased, use appropriate manual handling equipment/ aids as required. It may be necessary to carry out the procedure on the bed if transfer to the table is not possible.
- The Mortuary department would need to inform funeral services of the patient's weight so that suitable risk assessments can be carried out including: equipment, staff and transportation available.

## 9. AIRWAY, BREATHING AND CIRCULATION

Lungs and other organs do not increase in size as the patient becomes obese. Hyperventilation is the typical respiratory pattern of many morbidly obese patients. Groszek (1982).

The diaphragm is unable to fully descend because of adipose tissue and chest expansion is impaired; this results in decreased vital capacity and tidal volume which compromises tissue oxygenation. Wilson, Clark (2004).

If Lung volumes are reduced and air resistance increased, mechanical ventilation should be initiated with a tidal volume calculated according to **ideal body weight** rather than **actual body weight** to avoid high pressures, alveolar over distension and barotraumas Burns (1994).

Although morbidly obese patients have excess adipose tissue, they are susceptible to altered metabolic profiles demanding more unique and nutritional regimes. Milton Stokes (2004).

A morbidly obese patient will often suffer from sleep apnoea. Trimble (2003).

A morbidly obese patient's heart is frequently increased by the strain of supplying oxygenated blood to all the tissues. Maklebust, Sieggreen (1992). Obesity can cause venous hypertension. (Davis, Crawford (2002)) which increases the risk of pulmonary embolism, which decreases mobility due to insufficient circulation. (Trimble (2003))

Intravenous access is essential to control circulation via administration of prescribed medication, this can be difficult because of the excessive amounts of subcutaneous tissue present in morbidly obese patients, deeper veins are seldom seen and very difficult to palpate. Adams & Murphy (2000).

If an intravenous line is inaccessible a central line has to be considered, however this in itself can be difficult due to possible skin infections (yeast) in the skin folds. Asch & Murray (2001).

Due to poor peripheral circulation carrying out baseline observations is made difficult but it is made worse by staff using inappropriate equipment i.e. using thigh blood pressure cuff for arm.

The ratio of skin area to body mass is lower in the morbidly obese patient rather than those of average weight. The larger body mass combine with smaller relative skin areas, leads to increased perspiration and difficulty in controlling body temperature. Green, Gillett (1998).

## **10. RESUSCITATION OF A BARIATRIC PATIENT**

Use correct Resuscitation Guidelines as issued by Resuscitation officer.

- Identify any Intubation, Tracheostomy, Cannulation, Central Line problems.
- Use Automated External Defibrillation to reduce the risk of contact with the Client during defibrillation.

If resuscitation is required the morbidly obese patient presents a greater challenge than non-obese patients. Resuscitation is designed to maintain circulation of oxygenated blood to the vital organs, especially the heart, brain and kidney in an attempt to prevent degenerative processes associated with anoxia and tissue death until spontaneous cardiopulmonary function can be restored. The unique mental, anatomical and physical form of a morbidly obese patient in this situation can make it very difficult. Eadie (2004).

Airway protection is essential in emergency medicine and is the first step in patient care. An airway compromise can lead to cardiac arrest in only 4-10 minutes and irreversible central nervous system damage occurs within 3-5 minutes of shut down. Ruskin & Keith (1995).

Airway management of a morbidly obese patient is dreaded due to a tendency for a morbidly obese patient to have a "Bull Neck" (short, thick neck), increased soft tissue (double chins) and macroglossia (enlarged tongue) there is a concern that these plus possible neck oedema or subcutaneous emphysema will cause difficult intubations. The appropriate mask is important when ventilating a patient and of a close fit but it will likely require 3 people to ventilate a morbidly obese patient, (2 to hold the mask in place and 1 to ventilate). The auscultation of breath sounds is distant with morbidly obese patients and the weight of the head is one of the contributory factors to cause concerns during ventilation. Morbidly obese patients will de saturate oxygen rapidly due to decreased functional reserve capacity. Trimble (2003).

## **11. EQUIPMENT**

The correct equipment can help prevent injury and makes the patient feel at ease. Welsh (2004).

Reliance on mechanical hoists, wheelchairs, sliding sheets and commodes improves care of a morbidly obese patient and lowers risk of injury. Perkins (1999).

### **11.1 SWL and Space Constraints**

- All equipment to be used by the patient must be checked to ensure that the Safe Working Load (SWL) will not be exceeded.
- Consideration should be given to ward layout and the proximity of adjoining beds to ensure adequate space for equipment and the staff working with the patient to avoid injury due to cramped conditions.

### **11.2 Beds, Mattresses and Manoeuvres**

Having appropriate bed/trolley can make for greater manoeuvrability, staff safety and skin care. They need to be wide enough so that the patient can turn independently Gallagher (2001) Beds with low air-loss treatment may alleviate skin breakdown for those who have to stay in bed for more than a few days. Argenta & Morykwas (1997). The Tissue Viability Nurse Specialist may require input into patients care.

- All patients subject to this policy must be nursed on a full electric 'Heavy duty' profiling bed or the nightingale bed purchased by the hoist.

- All requests for special mattress must go via Line Managers and be agreed by Tissue Viability nurse (during office hours). The site manager to be contacted out of hours.
- The SWL of the mattress must be checked to ensure that it is sufficient to accommodate the patient's weight in order to maintain the integrity of pressure areas.
- Appendix II is the guidelines for equipment currently in Trust, however if an alternative is required contact manual handling department on 8248.
- A patient can be nursed in the seated position if they are on an electric profiling bed.

Bed assessments need to look at the SWL of the bed, to include the weight of the mattress and of health staff caring for the patient, height and width of bed, suitability of the bed design, sustaining tissue viability and working environment, including space constraints. Rush (2005).

The mattress needs to accommodate the patient's weight and work in conjunction with the bed it is supplied with. Foam mattresses often allow individuals more independence to assist with turning and getting in and out of bed. Rush (2005).

### 11.3 Trolley

- A variable height trolley suitable for patients subject to this policy must be made available for transporting/ transferring purposes
- Use Bariatric trolley available in A&E if patient within SWL
- Minimum of **three** staff are required to transport the trolley and patient. If a patient is transported on a bed a minimum of **four** staff would be required.
- On transfer a Patient Assisted Transfer Slide and a slide sheet are to be used with a minimum of **six** staff.

### 11.4 Hoists and Slings

Selecting slings is not just a case of measuring the size of the patient and selecting a sling, the weight distribution of the patient should be considered according to their body type. A sling with a long leg to wrap round the leg will be needed for 'pear body type' and if there is excess weight on the inside of the leg then care is needed to ensure that there is nothing to cause friction or damage to the skin between the thighs. If the patient has excessive buttock tissue, it will be difficult to

position the sling, especially if the individual is seated, so slide sheets may be required. Rush (2005)

- A sufficient amount of hoist slings must be made available and that they are within safe working load of the patient weight, the patient's body shape will need consideration.
- All wards within the Trust must have access to a hoist. All patient handling areas who do not possess a hoist should know where they can access one, if required.
- The SWL of the hoist and slings must be checked against the patient's weight before use and been checked by EME within last 6 months to a year.
- The Trust has a Viking XL hoist which will take 300kg (47stone), contact Manual Handling department on 8248 for details.
- Staff must not manually handle patients who require hoisting. They must wait for an appropriate hoist before moving the patient. If the patients cannot move themselves, they must be hoisted. If there is no suitable hoist for the weight of the patient then they will need to be nursed in bed until a hoist can be hired in, contact the manual handling department on 8248.

### **11.5 Chairs**

- The ward chairs must be assessed for SWL
- The body dynamics of the individual
- Environmental constraints
- Height, depth and seat width
- Pressure relieving properties

### **11.6 Wheelchairs**

Some wheelchairs are too heavy and wide for one person to push, if the wheelchair is self propelled, the user would need good upper body strength to move the wheelchair physically, they also require large doorways and a large turning circle. Rush (2005).

Our current Bariatric wheelchair takes 318kg (50stone) in weight and is located in the main foyer, if further wheelchairs require hiring then information can be found in Appendix V of 'Care of the Bariatric Patient Policy'.

## 12. PATIENT CARE

### 12.1 How to Weigh a Bariatric Patient.

- All patients must be weighed on admission, or as soon as is reasonably practicable.
- Average ward scales maximum weight varies from 150kg (23stone) to 200kg (31.5stone).
- Outpatients has wheelchair/ sitting/standing scales that will weigh up to a maximum of 500kg (78stone) including wheelchair, this belongs to the Trust and can be accessed by request.
- The Trust has bed/trolley scales that weigh Maximum patient weight of 300kg (47stone) total maximum weight is 500kg (78stone). Availability is via the manual handling department on 8248.

A detachable weighing device is available for the bariatric patient by contacting the manual handling department on 8248

**All patients in excess of 152kg (24stone) will be classed as Bariatric, due to equipment limitations.**

Volker (2004) identified that the **Body Mass Index (BMI)**, is the most common internationally accepted standards use to measure weight and the height of the people

$BMI = \text{Weight (Kg)} / \text{Height(M}^2\text{)}$

- Underweight < 20
- Healthy Weight 20 - 24.9
- Overweight 25 - 29.9
- Obese (Class 1) 30 – 34.9
- Obese (Class 2) 35 - 40
- Morbid Obesity 40+

(National Audit Office – Tackling Obesity in England 2001, World Health Organisation)

### **BMI = Body Mass Index**

To calculate the BMI divide the body weight in kilograms [kg] by the height in metres squared [m<sup>2</sup>] i.e.

### **Weight in Kilograms** **Height<sup>2</sup> in Metres**

E.g. A patient is **1.8 metres** in height and weights **171 kgs**

First multiply the height by itself:

$$1.8 \times 1.8 = 3.24$$

Then divide the weight by this number

$$\frac{171}{3.24} = 52$$

This person BMI is 52. They are morbidly obese.

An additional measurement used to indicate increased risk is waist measurement. A waist circumference in excess of 102cm carries a four-fold risk of cardiovascular disease development. This is equal to BMI over 30. Lean et al (1998).

“In every case, however, clinical judgement must prevail, especially in such cases as athletes, who have greater muscle mass, elderly people, where body diminishes due to ageing factors, or people with skeletal deformities” Rush (2005).

## **12.2 Patient Mobility**

Most of caring for a bariatric patient is based on simple daily movements and transfer techniques and established principles of moving and handling already practised and applied to any patient. Perkins (1999).

Morbidly obese patients have different body types, each needing different treatment and techniques. The body type can affect breathing and tolerance to movement as well as the risk to falls and sustaining unexpected injuries.

Pear-shaped patients have excessive adipose tissue in the gluteal-femoral region of the body. Although they are often able to move around quite well and can get from sitting to standing as they can push their centre of mass over their legs. Generally these patients have a more stable disposition. Although patient find that losing weight is more difficult with this body shape. This is predominantly a weight concern of women.

The apple-shaped person has excessive adipose tissue in the viscera or abdominal area. Often this adipose tissue can press on the aorta, vena cava and small capillaries, causing increased stress on the cardiovascular and respiratory systems. The risks are positional asphyxiation. The patients who have abdominal obesity have increased complications and more weight fluctuations. They have a higher chance of congestive heart failure. Dionne (2002).

Morbidly obese patients are at higher risk of cellulites (Trimble (2003)) and for the skin to breakdown resulting from impaired mobility, increased pressure due to weight and increased sheer movement. Blackett, Hennes (2004). The Tissue Viability Nurse Specialist may require input in the patient's care.

- All patients must be assessed to ascertain whether they are able to mobilise independently. Patients who cannot move independently in bed, or transfer from bed to chair or commode, must have a hoist.
- Staff must not assist patients when walking. Patients must be independent.
- The approximate SWL of a walking frame is 159kg (25stone). Heavy duty frame and wheelchairs are available. Contact manual handling department on 8248.

A wide walker is needed as the gait of the morbidly obese patient may be wide-based to accommodate a top heavy mass upon a narrow support and increased mass of thighs may tend for the legs to be further apart than most patients. Trimble (2003). Unsteadiness of a morbidly obese patient is often due to the complications of care.

### **12.3 Personal Care**

Patient independence is a must to prevent a morbidly obese patient feeling as if they are being judged by others. Pre planning staff involvement, equipment and time will prevent injury to both patients and health care professionals.

- For personal hygiene, the dependant patient should be bed bathed or assisted with their wash. Staff must take into account their own personal health and safety when assisting with personal activities of daily living.
- Maintaining skin integrity is a challenge. Washing underneath the skin folds is difficult as the weight of the folds is often too heavy for the individual to lift and wash underneath. Rush (2005).
- Drying under the folds is critical; leaving the skin underneath the folds wet encourages fungal and bacterial growth. Rush (2005).

Using a bath is not recommended for Bariatric individuals, where possible shower facilities, including a shower chair should be provided. Rush (2005).

- If a patient is not able to get out of bed themselves, he/she should be hoisted clear of the bed for bed making.

- Dependant patients should be hoisted up the bed or moved on extra wide, slide sheets with a minimum six people.

Urinary management is difficult for the morbidly obese patient. Normal toilet use should be encouraged. The purpose is to prevent skin breakdown and maintain patients self esteem. Holland et.al (2001).

However, increased intra-abdominal pressure secondary to adipose tissue predisposes them to urinary incontinence. Gallagher(2000). Moisture and urinary incontinence can exacerbate the environment in which micro organisms that contribute to skin breakdown can thrive. Agenta & Morykwas (1997).

Incontinence pads should be fit for the purpose and meet the needs of the individual. Giving inappropriate incontinence pads will detract from their dignity. Refer to the incontinence advisor for assessment. Rush (2005).

- A urinary bottle should be used for male patients or a slipper pan for female patients, for passing urine when they are unable to mobilise independently.

Nurses should be ready to assist the morbidly obese patients who cannot reach their own perinea areas to position urinary containers.

- Ambulant patients can use a commode placed at the bedside by transferring independently.

A wide commode is required because wall-hung toilets have a weight limit of between 42stone (267kg) and 60stone (380kg) and the plastic toilet seat takes 25stone (160kg). Welsh (2004). A wider commode makes toileting easier and is more comfortable as the standard commodes are uncomfortable, they pinch and the morbidly obese patient could get stuck. Trimble (2003).

- The standard ward commodes are not wide enough for the heavy duty patient and take an average of 152kg (24stone). A heavy-duty commode will be required contact the manual handling department on 8248.
- Patients must use the commode at the bedside. Staff must not push patients to the toilet on commodes as there is a high risk of back and shoulder injury.
- Dependent patients should be hoisted on the bedside commode, or hoisted clear of the bed, then lowered over the bed pan so that he/she is suspended just clear of the pan during toileting.
- For bowel movement, the patient should be left in the sling as this will maintain the patient in a stable and natural position, as well as reducing the risk of injury to staff.

- The leg straps on the sling should not be crossed when using a bedpan as this will facilitate cleaning of the patient once the bedpan has been removed.

Inserting catheters for a female obese patients involves difficulty in patient positioning, decreased visualisation of the urethral opening and it is likely extra help will be required to hold skin folds, male obese patients penis' may be retracted. Taggart et.al (2004).

- Hoisting the patient just clear of the bed with the leg straps uncrossed will facilitate catheterisation, should it be required. This method will safeguard staff safety as regards moving and handling and will promote the adoption of an aseptic technique.

## 12.4 Eating and Drinking

It is essential that advice should be sought from a dietician.

## 12.5 Clothing

In Hospital the dignity of a Bariatric patient is diminished, in some cases individuals have to wear two gowns when moving around. To encourage independence and dignity, encourage patients to bring their own clothing into hospital.

## 12.6 Fallen Patient

A hoist that takes the patients weight is required to move the morbidly obese patient safely. Gallagher (2001) this should have facilities to move a patient from the floor if they have fallen so that this will prevent injury to the staff. Trimble (2003).

- The fallen patient must be returned to bed using a hoist, if they cannot get of the floor independently. If the patients weight exceeds the SWL of the ward hoist, then the Viking XL 300kg (47stone) will need to be used.
- When a patient falls in an awkward area or away from the hoist the patient must be rolled onto extra large slide sheets and moved with a minimum of **six** people to position them safely for the hoist to be used.

## 12.7 Psychological needs

Bariatric patient are subject to intense prejudice and discrimination, the condition has a complex aetiology and because of this is often perceived to be under the control of the individual. Negative impacts contribute to the poor well being of the bariatric patient. The bariatric patient not only has to deal with prejudice but also the practicalities of overcoming environmental constraints, often increasing their feelings of isolation and humiliation which leads to low self esteem. Rush (2005).

Professionals need to work together on the sensitive issues surrounding caring for a Bariatric patient, this will ensure that the psychological needs are part of managing bariatric patients and that the individual is seen as a person not just someone who is morbidly obese.

### **13. STAFFING LEVELS**

Sufficient numbers of staff must be provided to assist with patient manual handling tasks. Special arrangements will be needed to cover night duty. Be aware of the other ward/department areas and patients when caring for the Bariatric patient. Extra staff may be required. (Appendix IV)

As identified by both the manual handling and risk assessment policies, it is important that current manual handling techniques are used at all times.

**Unsafe techniques and procedures must not be used.** According to present perceived best practice relating to patient handling and lifting, these include the drag lift, the orthodox lift, the australian lift and the bear hug.

### **19. SUMMARY**

Nursing care for the morbidly obese patient poses a significant challenge. Careful planning for the emergency admission, elective admission and discharge of a morbidly obese patient using a multidisciplinary approach and policy and protocols as guidelines, giving appropriate training and equipment will prevent litigation and injury costs. A morbidly obese patient should expect dignity and respect during a hospital stay. A morbidly obese patient should expect appropriateness, technical excellence, accessibility and acceptability. Horn (2002).

As a Trust the need is to be proactive rather than reactive to the rise in obesity and caring for the bariatric patient. All our patients have a right to expect non-discriminatory and appropriate healthcare and treatment. This includes providing the ability within healthcare facilities to deal with basic, easily anticipated requirements of mobilization and care. Rundle (2002).

## REFERENCES

*American Dictionary (2000) Definition of Bariatric.*

*American Obesity Association (2004) AOA fact sheet. July 18<sup>th</sup> 2004.*  
[www.obesity.org/subs.fastfacts/obesity\\_us.shtml](http://www.obesity.org/subs.fastfacts/obesity_us.shtml)

*American Obesity Association (AOA) (2005) Definition of Body Mass Index.*

*Adams. J & Murphy. P (2000) Obesity in Anaesthesia and intensive care. British Journal of Anaesthesia. 85:1:91-108*

*Anderton. J (2003) Designing bariatric in-patient accommodation.*  
<http://www.lboro.ac.uk/departments/hu/projects/abstracts/03er0001.html>

*Argenta.L & Marykwas. M (1997) Vacuum-assistive closure; a new method for wound control and treatment. Clinical experience. American Journal of Plastic Surgery. 38: 563-577.*

*Ali, Glenister (2001) Using manual handling equipment safely. Professional Nurse. 16:6:1153-1156.*

*Asch. M & Murray. R (2001) Venous access: options, approaches and issues. Canadian Association of Radiographers Journal. 52:3:153-164.*  
*Bariatric patient (2005) quote. <http://www.woundsource.com/bariatric/>*

*Blackett. A, Hennes. T (2004) Obesity. Impediment to past surgical wound healing. Advances in skin and wound care. The Journal for prevention and healing. 17;8;436-441*

*Blickenstorfer. C (2002) NAAFA convention: Bariatric ergonomics – Transfer and Mobility of the Obese Patient. <http://www.NAAFAconvention2002.com>*

*Brown Wilson (2001) Safer handling practise for nurses. A review of the literature. British Journal of Nursing 10; 2; 108-114.*

*Burns. S, Egloff. M, Ryan. B (1994) Effects of body position on spontaneous respiratory rate and tidal volume in patients with obesity, abdominal distention and ascites. American Journal of Critical Care. 3:102-106*

*Centres for disease control and prevention. Overweight and obesity health consequences (2003).*  
<http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm>

*Chiltern Invadex (2002) Solutions for Living. A guide to managing the moving and handling requirements of extremely heavy clients.*

*Davidson (2001) ABC of work related disorders. Chapter 16. Legal aspects.*

*Davis. J, Crawford. P (2002) Persistent leg ulcers in an obese patient with venous insufficiency and elephantiasis. Journal of wound ostomy and continence. 29:55-60*

*Dionne. M (1999) Preparing for Bariatric patients. Bariatric solutions from Gendron.*

*Dionne (2002) Medical problems of the obese patient. Bariatric rehab.*  
<http://www.bariatricrehab.com/coverstory02.html>

*Disabled Living Foundation (2001) Handling people, equipment, advice and information. 2<sup>nd</sup> Edition. Section 3. Risk assessment.*

Eadie. R (2004) *Resuscitative challenges in the obese patient. Obesity. NAASO's Newsletter. Volume2, number 6.*

El-Solh. A (2001) *Caring for the critically ill morbidly obese patient. University of Buffalo. America. University of Buffalo website.*

Gallagher. S (2001) *Bariatric Surgery. An important tool for treatment and weight loss for the obese patient. Xtrawise. 3;1;3*

Gallagher. S (2000) *Reducing the caregiver injury when caring for the obese patient. Journal of Healthcare safety, compliance and infection control. 15;9;18-24*

Gallagher. S (2000) *Restructuring the therapeutic environment to promote care and safer for the obese patient. Journal of Wounds, Ostomy and Continence. 26:292-7*

Gallagher. S. Langlois. C. Spacht. D. Blackett. A. and Hennes. T. (2004) *Preplanning with protocols for skin and wound care in obese patients. Advances in skin and wound care. 17;8: 436-441*

Geracimos. A (2004) *Obese patients strain hospitals. The Washington Times. Jan. 27.*

Green. S. Gillett. A (1998) *Caring for patients with morbid obesity in hospital. British Journal of Nursing. 7;785-92*

Groszek. D (1982) *Promoting wound healing in the obese patient. Advances in skin and wound care. 5;1132-8*

Harrell. J & Miller. B (2004) *Big challenge. Designing for the needs of a bariatric patient. <http://www.hfmmagazine.com/hospitalconnect/search/article.jsp?dcrpat>*

*Health and Safety at work Act (1992)*

Holland. D, Krulish. Y., Reich. H and Roche. J (2001) *How to creatively meet care needs of the morbidly obese. Nurse Management. 32;6:39-41*

Horn. S (2002) *Health care delivery in the united states. 7<sup>th</sup> edition. Springer publishing company. 362-394.*

<http://www.medicinenet.com> (2005) *Definition of Bariatric*

Ireton-Jones. C & Francis. C (1995) *Obesity: nutrition support practise and application to critical care. Nutritional clinical practise. 10: 144-149*

Lean, Hans, Seidell (1998) *Impairment of Health. Lancet 351: 853-6*

Macklebust. J, Sieggreen. M (1992) *Pressure ulcers: Guidelines for prevention and nursing management. 2<sup>nd</sup> edition. Springhouse corporation. Manual Handling Operations Regulations (1992)*

McGullivray. L (2004) *Going to extremes for weight loss- Part One. <http://www.medhunters.com/printarticle/goingToExtremesPartOne.html>*

Milton Stokes. D (2004) *The impact of obesity on healthcare delivery. <http://www.bariatric/theimpactofobesityonhealthcaredelivery.htm>*

*National Association of Tissue Viability nurses (South) (2002) Protocol for the Safer Management of Heavy Patients.*

*National Back Pain Association and Royal college of Nursing (1997) The guide to the handling of patients-Introducing a safer handling policy. 4<sup>th</sup> Edition. Chapter 1. Legal and professional responsibilities. RCN*

*National Back Pain Association and Royal college of Nursing (1997) The guide to the handling of patients. Introducing a safer handling policy. 4<sup>th</sup> Edition. Chapter 11. Risk assessments, principles and preparation. RCN*

*National Patient Safety Agency (2003) Seven steps to patient safety. A guide for NHS staff. [www.npsa.nhs.uk/admin/publication/docs/sevenstepoverview.doc](http://www.npsa.nhs.uk/admin/publication/docs/sevenstepoverview.doc)*

*Nursing and Midwifery Council (2002a) code of professional conduct. London. NMC.*

*Perking. H (1999) Where is bariatric rehab on the safety scale? Rehab report. June .19-23*

*Rand. C. Macgregor. A (1990). Morbidly obese patients perception of social discrimination before and after surgery for obesity. South Medical Journal. 83; 1390-5*

*Royal College of Nursing (1998) Safer working in the community. A guide for NHS managers and staff on reducing the risks from violence and aggression. RCN.*

*Royal college of Nursing (1981) Accountability in Nursing. RCN Seminar. London. RCN.*

*Royal College of Nursing (1997) Code of practise for patient handling. RCN*

*Royal College of Nursing (1996) Introducing a safer patient handling policy. RCN*

*Rundle. R (2002) Obesity Hidden costs. The Wall Street Journal. May1. B1*

*Ruskin. M & Keith. J (1995) Educational symposia in Anesthesiology and critical medicine. Vol 2 no 9.*

*Rush (2005) Overview of Bariatric Management*

*Sunday Times 14<sup>th</sup> November 2004.*

*Taggart. H. Mincer. A. Thompson. A (2004) Caring for the Orthopaedic patient who is obese. Orthopaedic Nursing. 23; 204-10*

*The American Heritage Dictionary of the English Language (2000) Fourth Edition. Published by Houghton Mifflin Company.*

*Trimble. T (2003) Outsize patients – a big nursing challenge! Emergency Nursing World. <http://www.enw.org/Obese.htm>*

*Welsh. R (2004) Rise in Bariatric Patient calls for specialized equipment, techniques. Nurse Community. <http://nsweb.nursingspectrum.com/cfforms/GuestLecture/Bariatric.cfm>  
WHO Obesity: Preventing and managing the global epidemic.*

*Wilson. J, Clark. J (2004) Obesity: Impediment to post surgical wound healing. Advances in skin and wound management: The Journal for prevention and healing. 17;8:426-432.*

## Appendix I

Morbid obesity is a chronic disease, meaning that its symptoms build slowly over an extended period of time. Obesity becomes “morbid” when it reaches the point of significantly increasing the risk of one or more obesity-related health conditions or serious diseases (also known as co-morbidities) that can result either in significant physical disability or even death. McGillivray (2004) Health problems related to obesity include diabetes, sleep disorders, lipedema, hypertension, soft tissue infection, some cancers and impaired circulation. Blackett, Hennes (2004).

### Co Morbidities

Obesity is a major risk factor associated with many chronic diseases, which reduce quality of life or lead to premature death.

Chronic diseases linked to obesity are:

<b>Greatly increased (&gt;3)</b>	<b>Moderately increased (2-3)</b>	<b>Slightly increased (1-2)</b>
NIDDM	CHD	Cancer breast cancer (in post menopausal women), endometrial, colon
Gallbladder disease	Hypertension	Reproductive hormone abnormalities
Dyslipidaemia	Osteoarthritis	Polycystic ovary syndrome
Insulin Resistance	Hyperuricaemia and gout	Impaired fertility
Breathlessness		Low back pain
Sleep apnoea		Anaesthesia complications
		Foetal defects in maternal obesity

Table 4.1 WHO TRS 894  
Obesity: Preventing and  
Managing the Global Epidemic

## Appendix II

### **Current equipment in Trust**

	<b>SWL</b>	
X1 Electric Profiling bed with Air comfort mattress	318kg	50stone
X1 Mobile Electric Liko Hoist	300kg	47stone
X1 Scales for Hoist	200kg	31stone
X1 Wheelchair scales	500kg	78stone
X1 Electronic bed/trolley scales (max patient weight)	300kg	47stone
X1 Wheelchair	318kg	50stone
X1 Walking Frame (physiotherapist aware of location)	298kg	47stone
X1 Commode (unable to locate, has to be hired)	300kg	47stone
X1 Static chair	318kg	50stone

Equipment can be obtained during office hours Monday to Thursday by contacting:

### **Manual Handling Department 8248**

**Out of office hours** contact the site manager who will assess whether the equipment is required immediately or whether delivery can be delayed until office hours.

**This equipment is a shared resource and must be:**

- **Signed in and out**
- **Cleaned** (in accordance to Trust Policy) **immediately after use**
- **Returned by arrangement with the manual handling department**

If you transfer this equipment to another ward you **must** advise the manual handling department

## Appendix III

### **Companies who hire Bariatric/specialised Equipment:**

Cost on enquiry to company only.

#### **Nightingale** **01978 661699 24 hour hire.**

Viking XL hoist (300kg)  
Gantry hoist (400kg)  
Electric Profiling bed (318kg)  
Commode/ shower chair (318kg)  
Wheelchair (318kg)  
Static chair (318kg)  
Rise/ recline (223kg)  
Walking frame (318kg)

#### **Poshchair Medical LTD** **023 80 436286 24hour hire.**

Static chair (318kg)  
Folding walking frame (292kgs)  
Wheelchair ((451kgs)  
Shower commode (254kgs, 349kgs & 381kgs)  
Gantry Hoist (400kgs)  
Profiling bed (381kgs & 4ft wide)

#### **Huntleigh Healthcare** **01582 745777**

Contora electric profiling bed (267kg)  
Contora electric profiling bed (500kg)  
IPC system (fits up to 71cm calf)  
Gantry hoist (400kg)  
Static armchair (254kg)  
Commode (254kg)  
Walking frame (300kg)  
Shower stool (300kg)  
Transfer chair (300kg)

#### **Liko** **01453 823000**

Viking XI hoist (300kg)  
Gantry hoist (400kg)

#### **KCI** **0800 980 8880**

Bari Air electric profiling bed system

#### **Pegasus** **(0) 23 9278 4200**

Bari med electric profiling bed system

## **Appendix IV**

Calculated on height, weight and body dynamics of the patient, Carers should work within their own body space, the number of carers required could vary from an absolute minimum of 4 up to and including 6 staff Rush (2005).

The concentration of resources on one patient may result in neglect of other patients needs. Milton Stokes (2004).

Therefore adequate staffing will be required not only to care for the Bariatric patient but also the other patients on the ward.