



Management of Elective Surgical Patients with a High Body Mass Index Procedure

1. Purpose

The purpose of this procedure is to provide guidance on the management of patients with a high Body Mass Index (BMI) who require elective surgery/procedure. It describes the risk assessments and processes required to ensure that the needs of these patients are safely managed, whilst minimising the risk of injuries to staff. This encompasses consideration of patient factors (e.g. anaesthetic considerations and post-operative care requirements), available equipment (e.g. weight and width limitations) and staffing requirements (e.g. staffing levels and skill-mix).

This procedure applies to all elective surgical patients with a high BMI (i.e. BMI greater than or equal to 25), excluding pregnant women. For guidance on these patients, refer to WACHS [Maternity High Body Mass Index and Bariatric Surgery Risk Management Policy](#).

Patients undergoing emergency surgery must be managed on an individual case-by-case basis depending on their clinical circumstances/urgency.

2. Procedure

2.1 Pre-operative assessment

All patients are required to have their height and weight measured and documented on the [MR20 WACHS Request for Admission/Waitlist Inclusion Form](#).

BMI is an internationally recognised standard to classify the body weight of adults. It is calculated as the person’s weight in kilograms, divided by their height in metres squared (kg/m²). The risk of anaesthetic and surgical complications increases for patients who have a high BMI. Potential complications include difficult airway, failure of oxygenation and ventilation.

All patients are required to have their BMI calculated and classified according to Table 1 below. This should be documented on the [MR20 WACHS Request for Admission/Waitlist Inclusion Form](#) under “Additional Notes/Instructions to Staff”.

Table 1: Classification of adults according to their BMI (adapted from World Health Organization (WHO). Obesity: preventing and managing the global epidemic. Report of a WHO consultation. Geneva; 2000).

BMI	Classification	Risk of co-morbidities
Less than 18.50	Underweight	Low (but risk of other clinical problems increased)
18.50 - 24.99	Normal range	Average
25.00 or greater	Overweight	
25.00 - 29.99	Preobese	Increased

30.00 - 34.99	Obese class I	Moderate
35.00 - 39.99	Obese class II (bariatric)	Severe
40 or greater	Obese class III (bariatric)	Very severe

Any requirements that support preparation for surgery (e.g. dietary advice or counselling) are to be identified during the pre-operative assessment.

2.2 Assessment of Safe Working Loads (SWLs) for equipment

In alignment with the WACHS [Risk Assessment for Admission of the Heavier Patient Policy](#), the WACHS [Risk Assessment for Admission of the Heavier Patient - Site Assessment Form](#) must be completed annually or after significant changes to the workplace.

All sites must be aware of the SWLs of relevant equipment in the perioperative and ward environments including operating tables, trolleys, beds, chairs, toilet seats, hoists, hover mats etc. Note that the SWL includes the weight of other supporting devices or materials attached to or placed on the equipment (in addition to the weight of the patient). This information is to be made available to treating specialists to support accurate decision-making around the patient's suitability for surgery at the site.

If the patient's weight/physical size exceeds the SWL or size limitations for any of the equipment required to safely undertake the proposed surgery and post-operative care, or if the required equipment is not available, then the patient cannot be considered for surgery at that site. The patient is to be referred for surgery at another WACHS or tertiary hospital as appropriate.

2.3 BMI restrictions (BMI ≥ 45)

Patients with a BMI of 45 or greater (≥ 45) who require **general anaesthesia, regional anaesthesia or sedation** must not be waitlisted for any type of surgical procedure at a WACHS hospital*. These patients are to be referred to the relevant tertiary hospital.

NOTE: Bunbury Hospital may consider patients with a BMI greater than 45, providing the site capability assessment confirms this is safe for both patients and staff (refer to [Section 2.4: Site capability assessment for bariatric patients \(BMI ≥ 35\)](#)).

Patients with a BMI greater than 45 who are waitlisted for a **minor procedure under local anaesthesia with no sedation** must be ambulant and able to position themselves with minimal assistance onto the operating table before and after their procedure. Otherwise, they are to be referred to the relevant tertiary hospital.

In exceptional circumstances, the Regional Director of Medical Services (in consultation with the Head of Anaesthesia (or their nominated delegate) and the Perioperative Clinical Nurse Manager (CNM)) may provide approval for patients with a BMI outside of the above limits to have surgery at a WACHS hospital, if it is safe for both the patient and staff, and appropriate to do so. This decision must be documented in the patient's medical record.

2.4 Site capability assessment for bariatric patients (BMI ≥ 35)

If the patient's BMI is 35 or greater (i.e. bariatric patient), an appropriate capability assessment must be undertaken prior to surgery to confirm that the site can safely operate and care for the patient.

The capability assessment is to ensure both patient and staff safety. It is to consider each stage of the patient journey and be undertaken in collaboration with multidisciplinary team members as required. This may include, but is not limited to:

- pre-admission staff
- surgeons
- anaesthetists
- perioperative nursing staff
- ward nursing staff
- allied health staff
- work health and safety consultant, if required.

This assessment must consider the following requirements at a minimum:

- type of anaesthesia (general, regional, sedation or local) and the patient's [American Society of Anesthesiologists \(ASA\) physical status classification](#)
- multidisciplinary staffing requirements for the surgery and post-operative periods, including:
 - number of staff (**NOTE:** a minimum of four staff and a hover mat are required to transfer patients weighing greater than 99kg between the operating table and bed. If a hover mat is not available, additional staff are required to transfer the patient)
 - skill-mix
 - appropriate training in the use of bariatric equipment
 - occupational safety and health/manual handling limitations
- availability of on-site medical practitioner coverage overnight
- availability of appropriate equipment (e.g. bariatric equipment, appropriate monitoring equipment)
- practical factors (e.g. bed/room allocation).

If the site capability assessment indicates that the patient cannot be safely managed, the patient is to be referred to another WACHS hospital or the relevant tertiary hospital.

2.5 Anaesthetic considerations

All patients with a BMI of 35 or greater require a pre-anaesthetic assessment prior to the day of surgery. The mode of anaesthetic consult (e.g. face-to-face or telehealth) is to be determined by the Anaesthetist.

3. Roles and Responsibilities

The **Regional Director of Medical Services** is responsible for:

- in exceptional circumstances, considering providing approval (in consultation with the Head of Anaesthesia (or their nominated delegate) and Perioperative CNM) for a patient with a BMI outside of the limits described above to have their surgery at a WACHS hospital. This decision should consider both patient and staff safety and the appropriateness of proceeding with the surgery given the support and resources available at the site.

The **Head of Anaesthesia (or their nominated delegate)** is responsible for:

- in exceptional circumstances, supporting decision-making (in consultation with the Regional Director of Medical Services and Perioperative CNM) about the appropriateness of a patient with a BMI outside of the limits described above having their surgery at a WACHS hospital. This decision should consider both patient and staff safety and the appropriateness of proceeding with the surgery given the support and resources available at the site.

The **Treating Specialist** is responsible for:

- ensuring the patient's height, weight and BMI are measured and documented on the [MR20 WACHS Request for Admission/Waitlist Inclusion Form](#)
- identifying obese patients to determine if they require assessment by an Anaesthetist prior to waitlisting for surgery
- confirming the patient's weight does not exceed the SWLs for the equipment required to safely undertake the proposed surgery/procedure and post-operative care, in collaboration with the Perioperative CNM/Theatre Coordinator
- ensuring all relevant investigations and reviews occur prior to surgery
- informing the perioperative staff (including the Anaesthetist, Perioperative CNM, Waitlist CNM and Pre-Admission Nurse, where applicable) of patient details, requirements and plans
- referring the patient to another WACHS or tertiary hospital as appropriate if the patient is not suitable for surgery at the site, and communicating this to the patient.

The **Anaesthetist** is responsible for:

- reviewing and assessing the patient to determine their suitability for anaesthesia at the site
- assigning the patient's [ASA physical status classification](#)
- ensuring the Treating Specialist is made aware of patients who are unsuitable for surgery at the site so that a referral can be made to another WACHS or tertiary hospital as appropriate
- planning for the surgical procedure, including consideration of a second Anaesthetist and extra staff if required.

The **Perioperative CNM/Theatre Coordinator** is responsible for:

- communicating the SWLs of equipment to Treating Specialists
- confirming the patient's weight does not exceed the SWLs for the equipment required to safely undertake the proposed surgery/procedure and post-operative care, in collaboration with the Treating Specialist and Pre-Admission Nurse
- confirming the applicability of the BMI restrictions outlined in [Section 2.3: BMI restrictions \(BMI \$\geq\$ 45\)](#), in collaboration with the Pre-Admission Nurse
- engaging the multidisciplinary team in a site capability assessment for patients with a BMI of 35 or greater (≥ 35)
- in exceptional circumstances, supporting decision-making (in consultation with the Regional Director of Medical Services and Head of Anaesthesia (or their nominated delegate)) about the appropriateness of a patient with a BMI outside of the limits described above having their surgery at a WACHS hospital. This decision should consider both patient and staff safety and the appropriateness of proceeding with the surgery given the support and resources available at the site.

The **Pre-Admission Nurse** is responsible for:

- undertaking pre-admission screening, including the identification and documentation of co-morbidities
- informing the Perioperative CNM/Theatre Coordinator of all patients with a BMI of 35 or greater (≥ 35)
- confirming the patient's weight does not exceed the SWLs for the equipment required to safely undertake the proposed surgery/procedure and post-operative care, in collaboration with the Perioperative CNM/Theatre Coordinator and/or Treating Specialist
- confirming the applicability of the BMI restrictions outlined in [Section 2.3: BMI restrictions \(BMI \$\geq\$ 45\)](#), in collaboration with the Perioperative CNM/Theatre Coordinator.

The **Work Health and Safety consultant** is responsible for:

- consulting with perioperative staff on issues relating to appropriate equipment and work practices, if requested.

The **multidisciplinary team (including pre-admission staff, treating specialist, anaesthetist, perioperative nursing staff, ward nursing staff, allied health staff and work health and safety consultant if required)** is responsible for:

- undertaking a site capability assessment covering all stages of the patient journey (as outlined in [Section 2.4: Site capability assessment for bariatric patients \(BMI \$\geq\$ 35\)](#)) to confirm that the site can safely operate and care for the patient
- planning for the patient's admission, e.g.
 - ensuring all required specialised equipment is available for surgery and the post-operative period
 - ensuring appropriate level of staffing.

All staff are required to work within policies and guidelines to make sure that WACHS is a safe, equitable and positive place to be.

4. Monitoring and Evaluation

4.1 Monitoring

Notification/s of any event of a serious or significant nature is to occur via the [Datix Clinical Incident Management System \(CIMS\)](#).

The effectiveness of this procedure will be monitored through the ongoing review of:

- patient and/or staff injuries
- clinical incidents (clinical case review)
- patient complaints
- safety risk reports.

Monitoring occurs at the site, regional and WACHS-wide levels via established governance processes.

4.2 Evaluation

Review of this document will be coordinated by the Surgical Services Program Team in collaboration with key stakeholders including relevant Advisory Forums. This will consider

any trends in relation to clinical incidents and patient and/or staff injuries relating to patients with a high BMI.

5. Compliance

This policy a mandatory requirement under the [Health Services Act 2016](#) (WA).

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

WACHS staff are reminded that compliance with all policies and procedures is mandatory.

6. References

Association of Anaesthetists of Great Britain and Ireland. Perioperative management of the morbidly obese patients. June 2007.

World Health Organisation (WHO). [Obesity: preventing and managing the global epidemic. Report of a WHO consultation](#). Geneva; 2000 (reprinted 2004).

7. Definitions

Term	Definition
Bariatric	An internationally accepted term applied to individuals whose weight exceeds 120kg or BMI is greater than 35 (morbidly obese), and where body size restricts their mobility, health or access to available services.
Body Mass Index (BMI)	A mathematical calculation to determine indirect measurement of body fat. It is defined as the weight in kilograms divided by the square of height in metres (kg/m ²). Depending on the BMI value calculated, a person may be underweight, normal weight, overweight or obese.
Safe Working Load (SWL)	The SWL (also known as the Working Load Limit) is the maximum safe force that a piece of lifting equipment, lifting device or accessory can exert to lift, suspend or lower a patient without fear of breaking.

8. Document Summary

Coverage	WACHS wide
Audience	All staff involved in providing patient care
Records Management	<ul style="list-style-type: none"> • Non Clinical: Corporate Recordkeeping Compliance Policy • Clinical: Health Record Management Policy
Related Legislation	<ul style="list-style-type: none"> • Health Services Act 2016 (WA) • Work Health and Safety Act 2020 (WA) • Work Health and Safety (General) Regulations 2022 (WA)
Related Mandatory Policies / Frameworks	Nil
Related WACHS Policy Documents	<ul style="list-style-type: none"> • Adult Airway Management - Clinical Practice Standard • Maternity High Body Mass Index and Bariatric Surgery Risk Management Policy • Occupational Safety and Health Policy • Pre and Post Procedural Management Clinical Practice Standard • Risk Assessment for Admission of the Heavier Patient Policy
Other Related Documents	Nil
Related Forms	<ul style="list-style-type: none"> • MR20 Request for Admission/Waitlist Inclusion Form • Risk Assessment for Admission of the Heavier Patient - Site Assessment Form
Related Training Packages	Nil
Aboriginal Health Impact Statement Declaration (ISD)	ISD Record ID: 2679
National Safety and Quality Health Service (NSQHS) Standards	1.27, 5.04, 5.05, 5.06, 5.10
Aged Care Quality Standards	Nil
National Standards for Mental Health Services	Nil

9. Document Control

Version	Published date	Current from	Summary of changes
2.00	24 November 2023	24 November 2023	<ul style="list-style-type: none"> change of title from Management of Elective Surgical and Obstetric Patients with an Elevated Body Mass Index Procedure full review; removal of obstetric patients from the scope of this procedure
2.01	9 January 2024	24 November	<ul style="list-style-type: none"> refinement of Work Health and Safety role and responsibilities

10. Approval

Policy Owner	Executive Director Nursing and Midwifery
Co-approver	Executive Director Clinical Excellence Executive Director Medical Services
Contact	Coordinator of Nursing – Perioperative
Business Unit	Nursing and Midwifery – Surgical Services
EDRMS #	ED-CO-16-26562
<p><i>Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.</i></p>	

This document can be made available in alternative formats on request.