

Standards for Bariatric Surgery

Health Regulation Department

2018



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Dubai Health Authority

BACKGROUND

Dubai Health Authority (DHA) is the responsible entity for regulating, licensing and monitoring health facilities and healthcare professionals in the Emirate of Dubai. The Health Regulation Department (HRD) is an integral part of DHA and was founded to fulfil the following overarching strategic objectives:

Objective # 1: Regulate the Health Sector and assure appropriate controls are in place for safe, effective and high-quality care.

Objective # 2: Position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

Objective # 3: Direct resources to ensure happy, healthy and safe environment for Dubai population.

ACKNOWLEDGMENT

This document was developed by the HRD in collaboration with Subject Matter Experts. The Health Regulation Department would like to acknowledge and thank these professionals for their dedication toward improving the quality and safety of healthcare services.

The Health Regulation Department

Dubai Health Authority

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EXECUTIVE SUMMARY

Dubai Health Authority (DHA) is pleased to present version two of the DHA's Standards for Bariatric Surgery. This document has been revised in line with the evolving healthcare needs and international clinical best practice along with revised language. Several updates and amendments have been included in the revision including but not limited to:

- The health facility requirements, which were previously placed in appendix, now with the main body of the document.
- Hospitals must perform a minimum of 100 bariatric surgeries per year of which 40 surgeries will include Roux-en-Y gastric bypass, duodenal switch or sleeve gastrectomy.
- Day surgical centres must provide a minimum of 50 bariatric surgeries per year.
- General Surgeons must aim to provide a minimum of 25 surgeries per year to maintain their competencies and privileges.
- Day surgical centres providing bariatric surgery shall have a signed written patient transfer agreement with a nearby hospital.
- Emphasis that all bariatric services shall be Consultant Led.
- Introduction of the term, Most Responsible Physician (MRP), who bears the ultimate responsibility for admitting, managing and discharging bariatric patients.
- Part time and visiting bariatric surgeons may perform bariatric surgeries in a health facility with a full time licensed surgeon having bariatric privileges.

- All health facilities providing bariatric services should have a dedicated multidisciplinary healthcare professional team with experience in bariatric patient management. The team should consist of nurses, gastroenterologist, psychologists, clinical dieticians, physiotherapist etc.
- Professionals privileged to perform bariatric surgeries shall maintain their knowledge and clinical skills on an on-going basis by attending a minimum of 40 continuous medical education (CME)/ continuous professional development (CPD) related to bariatric surgery for renewal of licensure.

DEFINITIONS

Bariatric surgery is a gastrointestinal surgery done to help obese patients achieve significant sustained weight loss. This may include, reducing the size of the stomach with a gastric band or through removal of a portion of the stomach (sleeve gastrectomy or biliopancreatic diversion with duodenal switch) or by resecting and re-routing the small intestine to a small stomach pouch (gastric bypass surgery).

Biliopancreatic diversion is a surgical procedure that involves removing the lower two-thirds portion of the stomach. The remaining part of the stomach is connected to the distal segment of the small intestine (the ileum).

Duodenal switch is a laparoscopic surgical procedure that combines the creation of a moderately sized stomach pouch with bypassing part of the small intestine.

Endomina (TM) is an innovative, newly introduced device in Brussels, Belgium that adds degrees of freedom and a number of therapeutic channels to existing endoscopes. Endomina provides surgeons with the capability to perform complex movements and use multiple instruments when operating.

Gastric bypass is a surgical procedure involving stapling of the upper stomach into a 15 to 45 millilitres pouch and creating an outlet to the small intestine. Surgery is reversible and can be performed laparoscopically or with the open approach.

Laparoscopy is a type of surgery in which small incisions are made in the abdominal wall through which a laparoscope and other instruments can be placed to permit structures within the abdomen and pelvis to be seen. A variety of probes or other instruments can also be pushed through these small incisions in the skin. In this way, a number of surgical procedures can be performed without the need for a large surgical incision.

Long-Standing Physician refers to physician who has been practicing/performing bariatric surgeries for a period of ten (10) years or more.

Reduced Port Single Incision (SILS) is a method of using either one incision about 2 to 2.5 cm in size, or a few smaller 3 mm incisions to accomplish the bariatric surgery without leaving obvious scars.

Roux-en-Y gastric bypass surgery is a one type of gastric bypass surgery, which involves cutting the stomach in two to create a pouch out of the smaller proximal (near) portion of the stomach, attaching it to the small intestine, bypassing a large part of the stomach and the entire duodenum.

Sleeve Gastrectomy is a restrictive procedure that involves removing part of the stomach (Left side) leaving a narrow gastric “tube” or “sleeve”. This surgery is performed laparoscopically and involves stapling of the stomach upon removal of the left side of the stomach. Intestines are not removed or bypassed during sleeve Gastrectomy.

ABBREVIATIONS

ACLS	:	Advanced Cardiovascular Life Support
BMI	:	Body Mass Index
BUN	:	Blood Urea Nitrogen
CAD	:	Coronary Artery Disease
CBC	:	Complete Blood Count
CME	:	Continuous Medical Education
CPD	:	Continuous Professional Development
DHA	:	Dubai Health Authority
DSC	:	Day Surgical Center
ECG	:	Echocardiogram
HbA1c	:	Haemoglobin A1c
HRD	:	Health Regulation Department
ICU	:	Intensive Care Unit
MRP	:	Most Responsible Physician
PT	:	Prothrombin Time
PTT	:	Partial Thromboplastin Time
T2DM	:	Type 2 Diabetes Mellitus
UAE	:	United Arab Emirates

1. INTRODUCTION

Bariatric surgery (weight loss surgery) is considered the last resort for patients that suffer from severe obesity and where all non-surgical and pharmacotherapy options have been exhausted. Bariatric surgery is considered an effective approach for treating obesity and results in substantial changes to patients' weight, diet and behaviour in relation to eating. Weight loss has known to improve a number of associated diseases including but not limited to Type 2 diabetes, sleep apnoea and high blood cholesterol.

Bariatric surgery includes a variety of procedures and may include a reduction in the size of the stomach with a gastric band or through removal of a portion of the stomach (sleeve gastrectomy or biliopancreatic diversion with duodenal switch) or by resecting and re-routing, the small intestine to a small stomach pouch (gastric bypass surgery). Bariatric surgery for adolescents (12-18 years) is generally not recommended and exceptional cases should be referred to health facilities with a Centre of Excellence status where they can be managed by multidisciplinary obesity management team. Bariatric surgery is not recommended for pregnant women and therefore excluded from this standard.

2. PURPOSE

2.1. To assure provision of the highest levels of safety and quality of bariatric services in DHA licensed health facilities at all times.

3. SCOPE

3.1. Bariatric services authorised by DHA

4. APPLICABILITY

4.1. DHA licensed healthcare professionals and health facilities providing bariatric services under the jurisdiction of DHA.

5. STANDARD ONE: HEALTH FACILITY REQUIREMENTS

5.1. Bariatric surgeries shall be performed only in a general hospital settings or specialized surgical hospitals with a fully equipped intensive care unit (ICU).

5.1.1. Hospitals shall maintain a minimum of 100 bariatric surgeries per annum of which 40 will include Roux-en-Y gastric bypass, duodenal switch or sleeve gastrectomy.

5.1.2. Hospitals performing bariatric surgery shall seek recognised accreditation within a period of 18 months, from the time they are licensed by DHA.

5.2. Day Surgical Centres (DSC) with appropriate equipment and critical support care requirements may provide bariatric services to stable patients with no co-morbidities who are likely to be discharged the day with low peri-operative risk score and low risk

of adverse event from anesthesia (refer to the American Society of Anesthesiology Classification System or equivalent).

5.2.1. DSC shall maintain a minimum of 50 bariatric procedures per annum.

5.2.2. DSC performing bariatric surgery shall seek recognised accreditation within a period of 18 months from the time they are licensed by DHA.

5.3. The DSC providing bariatric services shall have a signed written patient transfer agreement with a nearby hospital to transfer patients in case of an emergency that fully meets the requirements for bariatric patients.

5.4. The health facility providing bariatric service shall should have supporting service specifications to provide suitable medical, surgical, diagnostics and emergency care with appropriate equipment and instruments.

5.5. The size of instruments selected should meet the type of patients treated, this shall include but not limited to; blood pressure cuffs, staplers, retractors, long instruments, sequential compression device sleeves, etc.

5.6. Bariatric surgeries shall be restricted according to weight limits of the existing equipment.

5.7. Lifting and transfer equipment should be suitable to facilitate and accommodate obese patients. Weight capacities of equipment and furniture used shall be documented by the manufacturer's specifications and this information shall be readily available to relevant staff. Essential equipment and furniture may include but not limited to:

5.7.1. Bariatric wheelchairs

- 5.7.2. Patients chairs and seats
- 5.7.3. Patients beds
- 5.7.4. Gowns
- 5.7.5. Weighing scales
- 5.7.6. Stretchers
- 5.7.7. Floor-mounted or floor-supported toilets
- 5.7.8. Shower rooms.
- 5.8. Health facilities providing bariatric surgeries for morbidly obese patients (having a Body Mass Index (BMI) of 40 or more for Caucasians and 37.5 for Asians) shall meet specific design and space requirements to accommodate such patients.

5.9. Facility and space requirements

The health facility shall be designed and sized to accommodate the obese patients, and equipment needed.

5.9.1. Entrances and routes

- a. The health facility providing bariatric service shall provide easy access with ramps provided with handrails and ensure that they are wide enough to accommodate bariatric wheelchairs, walkers and other specialized conveyances.
- b. Elevator weight capacity shall be considered to make common areas easily accessible for patients, equipment and caregivers.

5.9.2. Doorway and corridor widths

- a. To accommodate bariatric wheelchairs, 1.2 meters doorway openings are required.
- b. Where the passage of bariatric stretchers is needed, doorways should be a minimum 1.37 meters.
- c. Wider door standards in the diagnostic and treatment rooms, inpatient rooms and surgical suites and other areas where a bariatric patient is treated.
- d. Corridors should be a minimum of 1.52 meters wide to accommodate bariatric wheelchairs and bariatric stretchers.

5.9.3. Lobbies and waiting areas

- a. Up to 10-20% of general seating should be bariatric. Provide at least 20% in emergency departments and up to 50% in cardiac and bariatric units with steel reinforced furniture to support a minimum of 340 kilograms.
- b. Appropriately sized elements with capacity adequate for obese patients should be interspersed with more traditional furnishings to avoid confining bariatric patients to specific areas of the waiting environment.
- c. Seat height shall be 0.45 meters to aid patient to rise.

5.9.4. Bariatric patient room

- a. The number of patient rooms provided should be as determined by the functional program.

- b. More space is needed for the bariatric inpatient rooms to accommodate the larger equipment needed for bariatric patient.
- c. The minimum space requirement of the patient room shall be 16.61 square meters with a door that is 1.52 meters wide.
- d. A minimum clear dimension of 1.52 meters should be provided on three sides of the stretcher/bed.
- e. Rooms should be located near elevators to provide a clear path of travel.
- f. Accommodations for patient lift and transport should be provided whether by an overhead lifting system or a portable lifting assist. These devices should be designed to accommodate a weight of not less than 363 kilograms.
- g. One additional design consideration is the placement of cubicle track in relation to ceiling-mounted lift tracks. This is especially important for privacy curtain placements as the lift track runs from bed to bathroom.

5.9.5. Bathrooms

- a. Shall be sized to allow for staff assistance on two sides of the patient at the toilet and shower.
- b. Dispensers shall be flush mounted to aid in clearance and safety.
- c. Opt for open showers with a floor drain.
- d. Bigger shower stalls with sufficient opening and space to feature heavy-duty wall-mounted grab bars that hold at least 340 kilograms.

- e. Additional options to consider for showers are multiple handrails, larger seats, handheld showerheads, space for adaptive equipment such as wheelchairs and lifts, tracking for ceiling lifts and accommodating ready access to shower, toilet and sink.
- f. Sinks shall be floor mounted with clearance on either side to accommodate a caregiver.
- g. Handrail designed to support a minimum of 181 kilograms shall be provided adjacent to the sink to support the patient if required.

5.9.6. Toilet rooms

- a. Provide floor-mounted toilets with weight capacity of at least 454 kilograms with oversized toilet seats a clearance of 1.52 meters. Toilet seat height shall be 0.45 meters to aid patient to rise.
- b. Provide reinforced grab bars that hold at least 340 kilograms.

5.9.7. Lifting equipment

- a. Patient lift and transport shall be provided either by an overhead lifting system or by a portable lifting assist. These devices shall be designed to accommodate weight of all treated patients.
- b. In those instances where mounted lifts rather than portable ones are being used, ceilings require additional steel reinforcement to be designed into the structure to support these devices.

6. STANDARD TWO: HEALTHCARE PROFESSIONAL REQUIREMENTS

- 6.1. The medical director is responsible to privilege physicians to perform bariatric surgeries.
- 6.2. A privileged Consultant/Specialist General Surgeon shall perform bariatric surgeries.
 - 6.2.1. Exceptions may be considered for long standing physicians by DHA
 - 6.2.2. All long-standing physicians must submit a written request for DHA approval with supporting evidence.
- 6.3. All bariatric service shall be Consultant Led.
- 6.4. For each admitted patient, the health facility should designate a Most Responsible Physician (MRP), who should be the ultimate responsible for admitting, managing and discharging the bariatric patients.
- 6.5. Health facility providing bariatric services shall have a full time privileged bariatric surgeon.
- 6.6. Part time and visiting bariatric surgeon shall not be permitted to perform bariatric surgeries in a health facility lacking full time licensed physician with bariatric privileges.
- 6.7. Any health facility providing bariatric services should have a dedicated multidisciplinary healthcare professional team with experience in bariatric patient management. The team should consist of anaesthesiologist, nurses, psychologists, gastroenterologist, clinical dieticians and physiotherapist.
- 6.8. All healthcare professionals shall be trained to use the equipment and be capable of moving obese patients without injury to the patient or themselves.

- 6.9. Physicians performing bariatric surgeries shall be responsible for demonstrating defined experience and exposure to the discipline's unique cognitive, technical and administrative challenges.
- 6.10. Physicians performing bariatric surgeries shall be suitably trained and assessed as competent to perform them and competent to recognize and treat related complications.
- 6.11. Physicians performing bariatric surgeries shall have a clear and documented process to record patient details in their health records, which are as follows:
- 6.11.1. Patient selection criteria
 - 6.11.2. Pre-operative assessment and counselling
 - 6.11.3. Early/acute postoperative care (immediate care at 1-4 days) and upon discharge
 - 6.11.4. Postoperative management follow up at 3 months, 6 months, 12 months and then as per the patient's condition. This includes, but not limited to:
 - a. Assessment of weight loss
 - b. Physical activity advice and support
 - c. Management of dietary and nutritional deficiencies
 - d. Bone density measurement at 1 year and 5 years
 - e. Assessment of lipid and glucose level and medication review
 - f. Management of post-operative complications.

6.12. Eligibility Criteria for Privileging

6.12.1. **General Surgeons, Consultant or Specialist** to perform bariatric surgeries, should meet the following requirements:

- a. Valid DHA license as consultant or specialist general surgeon
- b. Evidence of successful completion of formal training in bariatric surgery, which includes completion of one of the below courses:
 - i. Bariatric surgery fellowship
 - ii. Updated logbook, showing evidence of performing different types of bariatric surgeries in the previous 2 years with a minimum 25 bariatric surgeries performed per year including Roux-en-Y gastric bypass, duodenal switch or sleeve gastrectomy.

6.13. Granting bariatric surgery privileges

6.13.1. The medical director of the health facility is responsible to:

- a. Grant privileges to full-time, part-time and/or visiting physicians to perform bariatric surgeries in the health facility. The medical director should ensure that the physician has the appropriate certification, training and experience to perform bespoke procedures.
- b. Ensure that the healthcare professionals involved in providing bariatric services are adequately qualified and well trained to provide such services.
- c. Ensure that the degree of complexity of the surgeries is within the health facility capabilities.

- 6.13.2. To grant the bariatric privilege, the treating physician shall fill a specific privileging form that which should be reviewed and approved by the health facility credentialing and privileging committee and by the medical director.
- 6.13.3. This privileging document shall be kept in the physician's personal file and provided for DHA review whenever required.
- 6.13.4. The process of granting privilege for newly appointed and visiting physicians shall be completed before conducting any bariatric surgery in the health facility.
- 6.13.5. Existing privileges provided to physicians before issuing this standard shall be reviewed according to this standard and as per the bariatric surgeon's scope of practice.
- 6.13.6. The credentialing and privileging committee or the medical director may suspend/revoke privileges at any time, as per the health facility policy and the action shall be validated with appropriate documented reasons.

6.14. Renewal of bariatric surgical privileges

6.14.1. Privileged surgeons involved in bariatric surgeries/procedures shall maintain their knowledge and clinical skills on an on-going basis by attending a minimum of 40 continuous medical education (CME)/ continuous professional development (CPD) related to bariatric surgery for renewal of licensure.

6.14.2. The health facility credentialing and privileging committee shall review the surgeons' skills, competencies and CPD courses to renew their privilege in bariatric surgeries/procedures.

7. STANDARD THREE: PRE-OPERATIVE EVALUATION & INFORMED CONSENT

7.1. A detailed medical history with respect to any previous disease, drug intake and prior surgical procedures shall be taken of any patient indicated for bariatric surgery.

7.2. Screening of eligible patients to ensure appropriate selection is the ultimate responsibility of the treating physician and the supporting healthcare professionals.

7.3. Bariatric surgery is not indicated for cosmetic purposes, but for prevention of the pathologic consequences of morbid obesity.

7.4. Bariatric surgery is an option for carefully selected patients with clinical obesity, when less invasive methods of weight loss have failed and the patient is at high risk for obesity associated morbidity or mortality.

7.5. Bariatric surgery shall be considered for individuals who meet the below patient selection criteria:

7.5.1. Adolescent patients (12-18 years of age)

Adolescent patients shall be referred to health facilities with centre of excellence status with multidisciplinary obesity management teams. The team shall include specialists in paediatrics with extended experience in evaluation and management of adolescent obesity, consultant surgeons, psychologists, gastroenterologist, nutritionists and physiotherapist with experience in managing bariatric patients. The availability of additional paediatric specialists in endocrinology, pulmonology, gastroenterology, cardiology and/or orthopaedic is required.

7.5.2. The criteria for undergoing bariatric surgery/procedure in adolescents has particular risks and benefits that must be accounted for when considering this approach. The unique psychological and emotional needs of adolescent patients make the patient selection criteria and perioperative management substantially different from those of adult patients to better address the needs of this group of patients.

7.5.3. Bariatric surgery during pregnancy is not permitted. Patient who become pregnant following bariatric surgery should undergo nutritional screening every trimester.

7.5.4. Age of 18 years and older - Patient selection criteria should be based on the following:

a. Basic Metabolic Index (BMI):

i. Have BMI of > 40 kilograms/square meters with or without comorbidities

OR

ii. Have BMI of 35-39.9 kilograms/square meters with one or more of the below comorbidities

OR

iii. Have BMI of 30-34.9 kilograms/square meters with at least two of the below comorbidities. The comorbidities may include:

- b. Life threatening cardiopulmonary problems as coronary artery disease (CAD), type 2 diabetes mellitus (T2DM), obstructive sleep apnea, obesity hypoventilation syndrome, Pickwickian syndrome, non-alcoholic fatty acid disease or non-alcoholic steatohepatitis, hypertension, dyslipidaemia, pseudo tumour cerebri, asthma, venous stasis disease, severe urinary incontinence, debilitating arthritis or obesity related cardiomyopathy, infertility, polycystic ovarian syndrome (PCOS), gout, varicose veins etc.
- c. Other obesity induced physical problems that interfere with lifestyle as musculoskeletal, neurologic or body size problems precluding or severely interfering with employment, family function and ambulation, and infertility in females.

- d. Individuals who have made efforts at weight loss for a minimum of six (6) months by participating in physician or professionally supervised weight loss programs and failed to achieve sustained weight loss.
- e. Patients that passed the preoperative assessment
- f. The health facility shall provide a clear protocol/clinical guideline for assessing patients preoperatively including, preoperative evaluation, preoperative management and other preoperative investigations.
- g. Preoperative investigations shall be based on clinical judgement and shall focus on screening for cardiac arrhythmia, prolonged QT syndrome, cardiomyopathy, uncontrolled endocrinology disease, sleep apnea and impaired thyroid function, especially in risky patients. The minimum preoperative assessment for bariatric surgery should include, but not limited to:
 - i. Blood studies including complete blood count (CBC), blood urea nitrogen (BUN), serum creatinine, electrolytes, thyroid stimulating hormone, thyroid function test, liver function test, haemoglobin A1c (HbA1c), serum insulin and fasting blood glucose.
 - ii. Coagulation profile such as prothrombin time (PT)/ partial thromboplastin time (PTT)
 - iii. Vitamin assay for vitamin B12, folate and vitamin D
 - iv. Lipid profile

- v. Echocardiogram (ECG)
- vi. Assess sleep patterns
- h. Patients with morbid obesity may be advised hepatic diet in specific conditions to achieve change in liver size and fat content former to the bariatric surgery.
- i. Patients with comorbidities should be referred to consultant/specialist like psychiatrist, psychologist, psychotherapist, cardiologist, endocrinologist, pulmonologist etc. for evaluation and clearance of the relevant conditions before the bariatric surgery.
- j. The patient shall be assessed suitable for the surgery/procedure via a process involving psychological, surgical, dietetic and medical review.
- k. Contraindications to surgery/procedure may include, but not limited to, severe heart failure, unstable coronary artery disease, end-stage lung/renal/hepatic/cardiopulmonary disease, active cancers, cirrhosis with portal hypertension, uncontrolled drug or alcohol dependency and severely impaired intellectual capacity. It also includes patients who are unable to understand the nature of bariatric surgery/procedure or the behavioural changes required afterward, including untreated schizophrenia, active substance abuse and noncompliance with previous medical care.
- l. The patient shall be physically and psychologically fit to proceed with the bariatric surgery/procedure.

- m. The treating physician should decide the method of bariatric surgery incision.
Reduced port single incision can be selected if the physician is competent to perform it.
 - n. Expectations shall be managed by giving patients the correct and realistic information on what the surgery/procedure can achieve. For each patient, the benefits of the surgery/procedure should outweigh the risks.
 - o. Patients' ability to comply with postoperative care should be determined.
 - p. To ensure the above a minimum of two (2) visits to the physician performing the bariatric surgery is required preoperatively, where the last visit should be after the completion of the preoperative investigation.
- 7.6. The treating physician shall take a pragmatic approach to the choice of bariatric surgery, and the decision shall be determined by the individuals' clinical phenotype, the aims of therapy, and perioperative risk.
- 7.7. The treating physicians shall have enough experience performing the surgery/procedure and managing complications (*refer to standard 2*).
- 7.8. Laparoscopy should be the primary choice for bariatric surgery/procedure.
- 7.9. When the laparoscopic approach proves to be difficult, the treating physician shall possess the necessary skills to convert to an open bariatric surgery/procedure.
- 7.10. As per the Decree of the Federal Law number (4) of 2016 concerning Medical Liability, informed consent shall be obtained by the treating physician from the patient or his designated representative (as applicable) after discussion of the complication, risks,

benefits, alternatives of surgery/procedure, the possibility of failure to lose weight and patient's right to refuse treatment.

7.11. The informed consent shall meet all DHA's criteria mentioned in **Appendix 1**.

8. STANDARD FOUR: BARIATRIC SURGERY SERVICES

- 8.1. Bariatric surgery may be performed in hospital settings or in Day Surgical Centers (DSC).
- 8.2. Health facility performing bariatric surgery shall have a full time/part time privileged consultant/specialist and trained to provide bariatric services and manage related complications.
- 8.3. The health facility shall employ trained nursing staff responsible for assisting the in performing the surgical procedures.
- 8.4. A dedicated multidisciplinary healthcare professional team shall be available to support patient management. The team may consist of anaesthesiologist, gastroenterologist, psychologists and clinical dieticians.
- 8.5. The health facility shall be equipped with suitable instruments equipment to provide bariatric surgery.
- 8.6. The health facility shall have appropriate equipment and trained healthcare professionals to manage critical and emergency cases.
- 8.7. DSC shall have a signed written transfer agreement with a nearby hospital equipped to accommodate bariatric patients to ensure timely transfer of complicated cases.

- 8.8. DSC opting to perform e bariatric surgery and does not have fully equipped ICU capabilities, shall have ventilators and hemodynamic monitoring equipment on-site to perform necessary patient resuscitation.
- 8.9. The DSC shall have a policy in place for management and transfer of patients in case of emergencies.

9. STANDARD FIVE: CRITICAL CARE SUPPORT

- 9.1. The lead consultant and the MRP should be liable for proper patient selection based on the clinical status, available supporting services and related resources. For example, patients who are at risk of specific and predictable complications (renal failure, airway compromise, heart failure, etc.) shall only be managed in a hospital where medical care and resources for management of complications are available.
- 9.2. Written policies, procedures and clinical protocols should govern the bariatric surgery/procedure provided in the health facility. The health facility should adapt a model for classification of patient physical status such as American Association of Anesthesiologists (ASA) to identify the risk associated with the bariatric surgery/procedure.

9.3. Anaesthesia Services

9.3.1. The health facility shall have a protocol for anaesthesia care that adheres to UAE laws and regulations.

9.3.2. All anaesthesiologist and anaesthesia team shall work with in their scope of practice and be competent in handling obese patients, this includes but not limited to:

- a. Dosing anaesthetic drugs
- b. Choice of anaesthetic type
- c. Patient positioning
- d. Special equipment needs to anesthetize severely obese patients safely as, special equipment for positioning, large beds and operating tables, mechanical transfer mechanisms, additional personnel, extra-long needles, ultrasound and blood pressure cuffs.

9.4. Critical Care

9.4.1. An intensivist/anaesthesiologist trained and competent in handling obese patients and post-operative complications.

9.4.2. Trained critical care nursing staff available 24/7.

9.4.3. The nursing patient ratio shall be 1:1.

9.4.4. An Advanced Cardiovascular Life Support (ACLS) qualified physician shall be available on-site to provide ACLS when bariatric surgery/procedure patients

are present, this include but not limited to; defibrillation, drug administration, advanced airway management, etc.

9.4.5. The health facility shall have in place ventilators and hemodynamic monitoring equipment as well as have the capacity to manage a difficult airway and intubation.

9.4.6. When necessary, the health facility shall have the ability to stabilize critically ill patients and transfer them to a higher level of care if the health facility is unable to manage the patient on-site.

9.5. Patient Transfer

9.5.1. If the health facility is unable to manage the full range of bariatric surgery/procedure complications, it shall have a written and signed transfer agreement with a hospital capable of managing bariatric related complications. This transfer agreement shall detail the transfer plan of the bariatric patients.

9.5.2. For transferring patient with bariatric complications, the health facility shall maintain the following transfer requirements:

- a. Arrangement and plan for safe transfer of a bariatric patient to a hospital with advanced critical care services, the plan should identify action required from the time of the transfer decision to the initiation of care at the accepting hospital.

- b. Health facilities shall have adequate staff available to provide emergency support, including the time during transfer, until the receiving hospital resumes the patient's care.
- c. An ACLS certified individual should accompany the patient during the transfer.

9.6. Diagnostic services

9.6.1. The health facility shall maintain diagnostic and interventional radiology services requirements as follows:

- a. DHA licensed interventional radiologist or a physician trained to perform imaging, percutaneous drainage and other radiology procedures
- b. A radiology department that can perform emergency chest x-rays with portable machinery, abdominal ultrasonography and upper GI series
- c. Ensure that blood tests can be performed on a 24/7 basis, that blood bank facilities are available and blood transfusion can be carried out at any time
- d. A health facility that does not have a required interventional radiology capability shall have a signed written referral agreement.

9.7. Access to additional required services

9.7.1. The health facility shall have, at all times, licensed consultants/specialists experienced in managing the full range of bariatric surgery/procedure complications:

- a. Cardiology

- b. Emergency and critical care
- c. Gastroenterologist
- d. Nephrology
- e. Pulmonology
- f. Psychiatry and rehabilitation.

9.7.2. A health facility that does not provide any of the consultation service listed above shall provide a copy of the signed written agreement for that service and a plan for provision of these services in the future.

10. STANDARD SIX: CONTINUITY OF CARE

10.1. All bariatric surgeries must have in place a continuity of care plan including but not limited to:

- 10.1.1. Regular follow up and review of outcome
- 10.1.2. Multi-disciplinary decision-making
- 10.1.3. Specialist support
- 10.1.4. Timely referral
- 10.1.5. Referral back to Primary Care setting

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APPENDIX

APPENDIX 1: SUGGESTED CRITERIA FOR INFORMED CONSENT

1. If the patients lack the full capacity (e.g. less than 18 years old) informed consent shall be taken from their relatives up to the fourth degree, before the procedure/surgery is performed.
2. Patients shall be provided with comprehensive and accessible information concerning and procedure/surgery alternatives.
3. The health facility management shall clearly define investigations, treatment and surgical procedures that require patient consent.
4. The health facility management must develop an internal consent policy and procedures that are consistent with the federal legislation including procedures for individuals lacking the capacity of making informed decisions.
5. Informed consent form shall be maintained in the patient's health record. It should be bilingual and contain the following:
 - 5.1. Patient full name as per the passport/Emirates ID, age, gender, and patient identification number
 - 5.2. The diagnosis
 - 5.3. The name of proposed surgery
 - 5.4. The risks and benefits of proposed procedures or treatment e.g. re-operation, excess skin, gallbladder disease, vitamin deficiency and malabsorption
 - 5.5. Alternatives and the risks and benefits of alternatives
 - 5.6. Statement that surgery was explained to patient or guardian

- 5.7. Date and time consent is obtained
- 5.8. Name and signature of the treating physician
- 5.9. Signature of a minimum one healthcare professional witnessing the consent (optional)
6. Informed consent shall be signed by the patient/guardian, witness, treating health professional, and translator if applicable.
7. All contents of the “Informed consent forms” should comply with the Decree of the Federal Law number (4) of 2016 concerning Medical Liability Law.
8. Healthcare professionals working in the health facility shall be informed and educated about the consent policy.
9. Where consent is obtained by the visiting community physician, the health facility management shall ensure that the signed consent is received and filed in the patient health record.