



دائرة الصحة
DEPARTMENT OF HEALTH

Document Title:	DOH Standard for Obesity and Weight Diagnosis, Pharmacological and Surgical Management Interventions		
Document Ref. Number:	PHP/PHPR/WMO/1.0	Version:	1.0
Approval Date:	11/03/2018	Effective Date:	12/03/2018
Last Reviewed:	15/06/2017	Next Review:	12/03/2021
Revision History:	This Standard replaces version 0.9 published in July 2013		
Document Owner:	Public Health Non-Communicable Diseases		
Applies to:	Healthcare Facilities and Professionals licensed by DOH in the Emirate of Abu Dhabi		
Classification:	<input checked="" type="radio"/> Public		

1. Purpose

This Standard aims to ensure the delivery of safe quality clinical care for obesity and weight management patients. It specifies the following requirements:

1.1 Eligibility criteria for surgical interventions for weight management in line with evidence base and international guidance;

1.2 Service specifications to be satisfied by Healthcare Facilities and Healthcare Professionals providing pharmacological and surgical weight management interventions; and

1.3 Health insurance authorization parameters and documentary evidence necessary for bariatric surgery for adults and adolescents (below 18 years of age).

2. Scope

2.1 This Standard applies to all Healthcare Facilities and Professionals licensed by DOH in the Emirate of Abu Dhabi perform bariatric surgery.

2.2 This Standard refers to patients identified as requiring pharmacological and surgical interventions including approved bariatric procedures by updated international best practices mentioned in **Appendix I**.

3. Duties for Healthcare Providers

All Healthcare Facilities and Professionals licensed by DOH to perform bariatric surgery must:

- 3.1 Provide clinical services in accordance with the requirements of this Standard, and the relevant DOH Clinical Care Standards.
- 3.2 Ensure and provide evidence that their practices reflect updated international best practices.
- 3.3 Report and submit e-Claims data in accordance with Chapter VI, DOH Healthcare Regulator Manual Version 1.0 on Data Management and as set out in the HAAD Data Standards and Procedures (www.haad.ae/DataDictionary).
- 3.4 Document and monitor quality and safety of clinical care and outcomes of surgical intervention for weight management performed on patients, and make these available to DOH for auditing, as and when requested to do so.
- 3.5 Comply with:
 - 3.5.1 DOH policies and standards on managing patient medical records, including:
 - 3.5.1.1 Requirements to develop effective recording systems,
 - 3.5.1.2 Maintaining patient records;
 - 3.5.1.3 Maintaining confidentiality;
 - 3.5.1.4 Adverse event management and reporting; and
 - 3.5.1.5 Privacy and security of patient information.
 - 3.5.2 Requirements to educate patients and fulfill the requirements of patient consent and patients' rights and responsibilities charter;
 - 3.5.3 DOH requests to inspect and audit records and cooperate with authorized auditors, as required for inspections and audits by DOH.
 - 3.5.4 DOH Standard Provider Contract;
 - 3.5.5 DOH Data Standards and Procedures.
- 3.6 Health care facilities are expected to provide records of quality indicators as specified in **Appendix III** to DOH inspectors.

4 Bariatric Surgery- Service Specifications

4.1 Facilities

- 4.1.1 Only licensed DOH licensed Healthcare Facilities are eligible to provide bariatric surgery for adults/children in Abu Dhabi.
- 4.1.2 Eligibility criteria for authorization to provide Bariatric Surgery Services in the Emirate of Abu Dhabi will include at least the following elements:
 - 4.1.2.1 A valid DOH hospital license that fulfils the requirements of **Appendices II**;
 - 4.1.2.2 Registration with a DOH authorized Health Insurance Payer.

- 4.1.4 Facilities providing bariatric surgery to patients who opt not to use health insurance coverage for surgery must also follow the clinical and regulatory requirements of this Standard (pre-authorization for coverage and health insurance does not apply in this case).

4.2 Healthcare Professionals

In order to perform bariatric surgery Healthcare professionals must fulfil the following requirements:

- 4.2.1 Have a valid license by DOH;
- 4.2.2 Practice within the specified scope of services of their facility, the job duties assigned to them by their employing facility and the privileges granted in accordance with the requirements of the DOH Clinical Privileging Framework Standard and using the guidance provided in **Appendix II**.

4.3 Services:

Bariatric services provided in an authorized Healthcare Facilities must fulfil the following requirements:

- 4.3.1 The service is provided (and/or supervised) by a DOH licensed physician; for bariatric surgery, the provider must fulfil the requirements of **Appendices I, II & III**.
- 4.3.2 Ensure that the multi-disciplinary teams comprise of all DOH licensed professionals necessary to deliver services in accordance with this Standard, and that bariatric surgeons satisfy the requirements of updated international best practices; **Appendix I & II**.
- 4.3.3 Provide a range of integrated clinical services surgical and non-surgical intervention for patients seeking weight management and/or obesity care in accordance with this Standard including the requirements of **Appendices I, II & III** (for adults and children);
- 4.3.4 Have available and maintain all equipment, support, intervention needs and supplies necessary for treatment and patient care, according to DOH regulatory requirements and standards and as per updated international best practices and **Appendix II**.
- 4.3.5 The provider must deliver culturally and socially relevant patient education and information regarding the treatment and care (pre and post operation in accordance with updated international best practices, consistent with the DOH Patient Charter and relevant DOH policies. Patient informed consent must be sought and documented in accordance with Medical Liability law and legal requirements for consent.

4.4 Patient Eligibility

The provider must ensure that bariatric surgery is delivered to patients who fulfil the following requirements:

- 4.4.1 Meet the defined criteria in **Appendix I**.
- 4.4.2 Have undertaken a comprehensive multicomponent lifestyle modification with/without pharmacological intervention with unsuccessful outcomes as specified in **Appendix I**:
 - 4.4.2.1 Evidence of clinical weight loss attempts is only acceptable from DOH licensed Healthcare Providers;
 - 4.4.2.2 Evidence that patient undertook non-clinical weight management programmes, such as a structured lifestyle intervention including exercise and/or behavioral and nutritional counseling from a facility licensed by DOH or by Abu Dhabi government authority is required. If the structured lifestyle modification programme is provided by a non-DOH licensed provider, the following additional requirements must be met:
 - 4.4.2.2.1 The programme provided is currently approved by an internationally recognized body specializing in this field;
 - 4.4.2.2.2 The outcomes of the programme are reviewed by a DOH licensed Physician and DOH licensed dietician who provide care in accordance with this Standard.
- 4.4.3 The patient is fit for anesthesia and surgery
- 4.4.4 The patient received pre-authorization where applicable;
- 4.4.5 In case of if comorbidity conditions that necessitate the performance of bariatric surgery, a careful decision should be made by a multidisciplinary team after weighing the risks and benefits of the surgery.
- 4.4.6 Commit to undertaking long-term follow-up by a health care professional trained in obesity management and in accordance to **Appendix II**. This include the provision of lab tests, lifestyle advice and post-bariatric supplements considering age, gender and type of surgery and in accordance to an updated international best practices.
- 4.4.7 The minimum requirements for documents evidencing meeting all requirements of **Appendix I**

5 Weight loss Pharmacological Interventions-Requirements

- 5.1 Prescription of any weight loss medication must only be provided by a DOH licensed physician who has the authorization, by his/her scope of practice, for prescribing weight loss medications; this should include all sub-specialists of internal medicine or family medicine specialists / consultant;

- 5.2 Pharmacological treatment should be considered only after comprehensive lifestyle intervention (dietary, exercise and behavioral approaches) have been initiated adequately and failed to achieve satisfactory measure as assessed by a multi-disciplinary team including a minimum of DOH licensed dietitian and authorized physician.;
- 5.3 Patient who already started on weight loss medication should receive continuous lifestyle interventions including dietary advice in alignment with medical therapy;
- 5.4 The efficacy of weight loss medication should be evaluated in accordance with updated international best practices. Physician who prescribe weight loss medications should consider stopping medications if the patient fulfils the medication cessation criteria specified in the international best practices and guidelines; and
- 5.5 If the achieved weight loss progress is satisfactory as per international best practices and guidelines, then treatment can be continued.

6 Service Model

Healthcare Provider's including those providing surgical and/ or pharmacological intervention will be required to ensure the following from their services and management systems:

- 6.1 Are in compliance with current DOH standards, e.g. for clinical supervision, including the requirement for regular peer review such as comprehensive case reviews by Consultants;
- 6.2 Are capable of tracking performance, including trends in clinical quality/outcomes for patients by documenting the detailed reporting specifications provided in **Appendix III**.
- 6.3 Provide seamless care in partnership with other providers, including primary care and hospitals, as required for holistic patient care; and
- 6.4 Facilities and professionals licensed by DOH to undertake bariatric surgery may consider updated international best practices for bariatric surgery center requirements, specifically facility and professional privileging requirements.

7. Payment Mechanism

- 7.1 Eligibility for reimbursement for weight management and bariatric surgery services under the Health Insurance scheme is as follows:
 - 7.1.1 For UAE Nationals covered under the Thiqa scheme; and
 - 7.1.2 For Non-Nationals (Basic and Enhanced products holders) consistent with their insurance policy and policy schedule of benefits approved by DOH.
- 7.2 Any procedure not mentioned under the approved procedures in this Standards (Appendix I), is not recommended per practice, therefore, insurance coverage will not be issued.

7.3 When insurance does not cover the surgery services and patients opt for self-pay; clause 4.1.4 should be applied.

7.4 Reimbursement for weight management and bariatric surgery services is subject to pre-authorization as per this Standard, and shall be in accordance with Standard Provider Contract, DOH Mandatory Tariff and associated Claims and Adjudication Rules, and the Claims and Adjudication Standard. All documents are available at the DOH website in under Data Dictionary.

8 Enforcement and Sanctions

DOH may impose sanctions in relation to any breach of requirements under this standard in accordance with the Chapter XI Complaints, Investigations, Regulatory Action and Sanctions Policy, Healthcare Regulator Manual Version 1.0.

Appendix I: The list of approved bariatric procedure by DOH, criteria for eligibility and documented evidence necessary for approvals of bariatric surgery

1. The below listed procedures are the current DOH approved bariatric procedures:
 - Intra-Gastric balloon;
 - Adjustable gastric banding;
 - Biliopancreatic diversion with duodenal switch;
 - Biliopancreatic diversion without duodenal switch;
 - Revisional bariatric surgery;
 - Roux-en-Y gastric bypass;
 - Mini - gastric bypass;
 - Sleeve gastrectomy.
2. Any procedures not approved in the standards, will be considered as investigational procedures;
3. Investigational procedures should be performed after gaining IRB-committee approval and should not be considered in practice;
4. Any procedure not mentioned under the approved procedures in this Standards, is not recommended per practice, therefore, insurance coverage will not be issued.

Adults 18 years or over

Criterion	Requirements for eligibility for bariatric surgery	Documentary evidence
Clinical indicators	<ul style="list-style-type: none"> • BMI of 40 *without comorbidities. • BMI of 35 to 39.9 with at least one comorbidity** (are expected to improve after surgical intervention). • BMI of 30 to 34.9 with uncontrolled type 2 Diabetes Mellitus can be considered in individual basis *** • BMI criterion may be the current BMI or previously maximum attained BMI of this severity. Note: Bariatric surgery is indicated in patients who had exhibited substantial weight loss through extensive lifestyle interventions but began to regain lost weight even if the required minimum indication weight for surgery has not yet been attained again. 	Medical report to include: <ul style="list-style-type: none"> • Patient information; • BMI; • List of investigation required for bariatric surgery according to international standards for care of obesity and obesity related diseases; • Evidence of the assessment of the comorbid condition and the necessity of surgery from all MDT members in accordance to their practices and capabilities.

<p>Service/consultation</p>	<p>1. Weight loss attempts:</p> <ul style="list-style-type: none"> • Must have been delivered by a DOH licensed professional who has the authorization by his/her scope of practice in weight management, • Patient must have failed to achieve or maintain adequate, clinically beneficial weight prior to surgery. <p>2. Counseling: All patients must have received counselling and clearance for surgery from a multi-disciplinary specialist team including a minimum of a:</p> <ul style="list-style-type: none"> • Physician trained on obesity care (This should include internal medicine or family medicine specialists / consultant”); • Surgeon; • Psychologist; and • Clinical dietitian. <p>3. The multi-disciplinary specialist team may consider earlier access to surgery if delay may increase the health risks of the patient.</p> <p>4. The multi-disciplinary specialist team must insure to exclude all health conditions that are contraindicated for bariatric surgery, including but not limited to:</p> <ul style="list-style-type: none"> • Untreated major depression or psychosis; • Uncontrolled and untreated eating disorders (e.g. Bulimia); • Current drug and alcohol abuse; • Severe cardiac disease with prohibitive anesthetic risks; • Severe coagulopathy; • Inability to comply with nutritional requirements including life-long vitamin replacement. 	<ul style="list-style-type: none"> • Report from a DOH-Licensed dietitian who has authorization by his/her scope of practice in weight management. • Evidence of the delivery of a structured program for lifestyle intervention and with/out pharmacological intervention. • Physician/nurse license number to be checked against DOH database. • Report of support from a psychologist (psychiatrist if needed). • Report from the bariatric surgeon with justifications for the requirement for Bariatric surgery. • Signed consent form including evidence of explanation of risks and benefits of bariatric surgery. • Evidence of the designated Specialized bariatric team who will undertake post-surgery follow-up.
-----------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>5. Consent process must:</p> <ul style="list-style-type: none"> • Be undertaken by bariatric surgeon; • Fully explain risks and benefits of bariatric surgery including the short, medium and long-term risks; • Have a signed consent form which should be kept in the patient's records (Medical Liability Law). <p>6. Bariatric surgery facility must offer follow-up post-surgery with any member of multi-disciplinary team based on patient's need for a minimum of 2 years and insure the following requirements are fulfilled:</p> <ul style="list-style-type: none"> • Monitoring nutritional intake (including protein and vitamins) and mineral deficiencies; • Monitoring for comorbidities and screening for complications; • Medication review; • Dietary and nutritional assessment, advice and support; • Physical activity advice and support • Psychological support tailored to the individual; • Information about professionally led or peer-support groups. 	
<p>Adolescents (below 18 years of age)</p>		
<p>Criterion</p>	<p>Requirements for eligibility for bariatric surgery</p>	<p>Documentary evidence</p>
<p>Clinical indicators</p>	<p>Adolescent candidates for bariatric surgery must meet all of the following indicators:</p>	<ul style="list-style-type: none"> • Medical report / pre-operation assessment according to an updated international best practices.

	<ol style="list-style-type: none"> 1. Be morbidly obese (defined by the World Health Organization as a body mass index >40) AND 2. Have comorbidities related to obesity that might be remedied with durable weight loss AND 3. Shows skeletal and developmental maturity AND 4. Have failed to lose weight through attempts of diet, exercise , behavior modification with/out pharmacological intervention over at least 6 months AND 5. All other attempts at behavior modification have failed to achieve weight loss goals over a six month period AND 6. Express willingness to follow program requirements which include signing an Assent form, having the individual's legal guardian sign a consent form; 7. Agreed to avoid pregnancy for a two years post operatively AND 8. Agreed to adhere to nutritional guidelines postoperatively AND 9. Has a supportive family environment AND 10. Confirmation by a senior clinical psychologist with child/adolescent experience or consultant/specialist psychiatrist with child/ adolescent experience that the subject is sufficiently emotionally mature to comply with the clinical protocol and fully understands the short, medium and long-term implications of the surgery. 	<ul style="list-style-type: none"> • Evidence of the delivery of a structured program for lifestyle modification.
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------

<p>Weight Loss Attempts</p>	<p>Evidence of Six months of a comprehensive, structured multi-disciplinary protocol including a structured behavior modification program****</p>	<ul style="list-style-type: none"> • Report from a DOH-licensed dietitian. • Evidence of the delivery of a structured program for lifestyle intervention.
<p>Service/consultation</p>	<ol style="list-style-type: none"> 1. Weight loss attempts: Must have been delivered by a DOH-licensed specialist. 2. Counseling: The child must have had consultation and counselling from a multi-disciplinary team with expertise in childhood obesity, including as a minimum a DOH-licensed: <ul style="list-style-type: none"> • Dietitian; • Behavioral specialist in pediatric and adolescent care; • Pediatric medical advisor† and a pediatric bariatric surgeon or adult bariatric surgeon with expertise in adolescent bariatric surgery and proven track record in adult bariatric surgery. 3. Assessment for surgery: Must only be made by a consultant level pediatric bariatric surgeon or adult bariatric surgeon with expertise in adolescent bariatric surgery and proven track record in adult bariatric surgery. 4. Consent Process must: <ul style="list-style-type: none"> • Be undertaken by the bariatric surgeon; • Fully explain the risks and benefits of bariatric surgery including the short, medium and long terms risks. 5. Bariatric Facility must: Offer follow-up post-surgery with a multi-disciplinary team including as a minimum a DOH-licensed: 	<ul style="list-style-type: none"> • Physician / nurse license number to be checked against DOH database. • Report from a DOH licensed dietitian with child/adolescent experience. • Report from pediatric medical advisor and behavioral specialist. • Report from a consultant bariatric surgeon with justifications of the requirement for surgery. • Signed consent form including evidence of explanation of risks and benefits of bariatric surgery. • Evidence of the designated pediatric specialist bariatric team who will undertake post-surgery follow-up.

	<ul style="list-style-type: none"> • Specialist pediatric bariatric surgeon or adult bariatric surgeon with expertise in adolescent bariatric surgery and proven track record in adult bariatric surgery, • Pediatric medial advisor • Specialist pediatric bariatric nurse, • Specialist pediatric bariatric dietician • Specialist pediatric bariatric support service. <p>6. Adolescent bariatric surgery should be performed in a Bariatric Surgery Facility/Center by a surgeon who fulfils the requirements of adult revisional / high-risk surgeries as per Appendix II(IA).</p>	
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

***Body Mass Index (BMI)** cut off may be different for some ethnic groups.

** The major comorbidities which evidence suggests can be improved by losing weight, according to NIH, are as follows:

- 1-Type 2 Diabetes
- 2-Dyslipidaemia.
- 3- Asthma
- 4-Hypertension
- 5-ischemic heart disease
- 6-Obstructive Sleep apnea syndrome
- 7- Obesity syndrome hypoventilation (pickwickian syndrome)
- 8- Disabling arthropathy.
- 9- Non-alcoholic fatty liver disease and steatohepatitis.
- 10- Gastro-esophageal reflux.
- 11- Sever urinary incontinence.
- 12- Venous stasis disease
- 13- Severely reduced quality of life. (To be determined by the bariatric MDT team.)
14. PCOS with infertility.

- The following comorbidities require additional assessment and referral from expert in the field of the comorbid disease: sever urinary incontinence, disabling arthropathy, venous stasis disease, PCOS with infertility.

***Uncontrolled type 2 Diabetes Mellitus that necessitates surgical intervention in patients with a BMI of 30-34.9 require a referral from a DOH authorized endocrinologist. Patient considered uncontrolled despite fully optimized conventional therapy.

****In accordance with DOH Standards for diagnosis, management and data reporting for weight management and obesity.

†Pediatric medical advisor: this includes individuals training in general pediatric, pediatric sub-specialty or internist / Family practitioner with training experience on adolescents and weight management.

Appendix II – Requirements for professionals and facilities undertaking bariatric surgery.

I. PROFESSIONALS

A. Surgeon's qualification- general and revisional/ high-risk surgeries:

1. Consultant surgeon:

In addition to a Valid DOH license as consultant general surgeon, to perform bariatric surgeries, surgeons must show evidence of successful completion of formal training in bariatric surgery, which includes completion of one of the below requirements:

- a. A one-year Bariatric surgery fellowship
- b. General surgery logbook showing evidence of performing different types of bariatric surgeries including gastric bypass and restrictive operations. An updated logbook of minimum of two (2) years duration should contain:
 - I. At least fifty (50) cases, performed in the previous two (2) years, of laparoscopic bariatric surgeries, involving stapling or division of the gastrointestinal tract (GIT)
 - II. **OR** at least twenty (20) cases, performed in the previous two (2) years, of laparoscopic gastric bypass surgery.

2. Revisional /High-risk surgeries:

Revisional Surgeries: Revisional bariatric intra-abdominal procedures include any procedure performed at any time frame following a previous surgical intervention performed for the treatment of morbid obesity.

Patient considered being a high-risk candidate for surgery if he/she have one of the following risk factors:

- a. Venous Thromboembolic Event (VTE) ,
- b. Body Mass Index (BMI) of 60, Obstructive Sleep Apnea (OSA) with Apnea Hypopnea Index (AHI) > or equal to 30,
- c. Poor functional status (decided by the MDT team),
- d. H/O Myocardial Infarction (MI) or Percutaneous Coronary Intervention (PCI),
- e. H/O of end-organ failure or transplant.

Revisional /High-risk surgeries should only be performed:

- a. By a consultant bariatric surgeon with at least 125 lifetime bariatric procedures including 40 Laparoscopic Roux-en-Y Gastric surgeries.
- b. Have at least minimum number of 50 bariatric procedure performed annually.
- c. In a health care facility, fulfilling the requirements 1-8 from bariatric facility requirements in accordance to **Appendix II.**

B. Gastroenterologist willing to perform endoscopic bariatric procedures should meet the following requirements:

1. Valid DOH license as consultant gastroenterologist.
2. Evidence of successful completion of formal training in the endoscopic bariatric procedure that the gastroenterologist is willing to perform.
3. Logbook showing evidence of at least twenty-five (25) endoscopic bariatric procedures the gastroenterologist has performed in the previous one (1) year. The logbook should be supervised and countersigned by an experienced gastroenterologist.

C. Bariatric license renewal requirements:

Privileged surgeons wishing to renew their bariatric licensing will be required to:

1. Show evidence of attending a minimum of 40 continuous medical education (CME)/ continuous professional development (CPD) related to bariatric surgery.
2. Show evidence of good practice in accordance to DOH reported KPIs performance.

II. FACILITIES

A. Bariatric facility requirements: requirement of health care facility undertaking bariatric surgery:

1. Employ bariatric surgeons and ensure the requirements of Appendices I, II and III are met;
2. Employ ACLS certified staff;
3. Provide instruments for lifting, transferring, and diagnosing; suitable for the size of bariatric patients and staff trained to use them;
4. Design and space requirement should base on the requirements of American Society for Metabolic and Bariatric Surgeries (ASMBS) for managing bariatric patient including but limited to entrance, corridors, wide doors, lobbies, bathrooms, patient room, and toilet room;
5. The healthcare Facility shall provide diagnostic and interventional radiology services;
6. Labs are open 24/7 basis;
7. Emergency and fully equipped critical care services;
8. Have specialist consultant experienced in managing bariatric surgery/procedure complications in the following fields of medicine: pulmonology, cardiology, nephrology, psychiatry, Gastroenterology and rehabilitation;

9. If the Healthcare Facility is unable to provide services mentioned from points 5-8, it shall have an evidence of written and signed agreement for a transfer plan with a hospital capable of managing bariatric related complication. The transfer agreement plan should include:
 - 9.1 The maximum distance between the sender facility and the receiver facility is 5-10 minutes of driving time;
 - 9.2 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;
10. Institutions willing to undertake adolescent bariatric surgery must meet below requirements in addition to Appendices I, II and III;
 - 10.1 Access to suitable equipment, including scales, theatre tables, Zimmer frames, commodes, hoists, bed frames, pressure-relieving mattresses and seating suitable for children and young people undergoing bariatric surgery, and staff trained to use them;
 - 10.2 In addition to all facility requirements from 1-8;
11. Facility employ visiting bariatric surgeons should ensure the fulfillment of the requirements in appendix I, II & III; in addition to points 1-8 from facility requirements section;
12. Ambulatory care Centre opting to preform bariatric procedures should fulfill the requirement of Appendices I, II and III in addition to the below requirements:
 - 12.1 Should preform only the approved endoscopic procedures as per our standards;
 - 12.2 Should have a transfer plan agreement to a facility capable to treatment endoscopic complications. In addition, to fulfil the requirements in accordance to Appendix II.B point 9.1 & 9.2 requirements;
 - 12.4 Procedures should not be performed on high-risk patients. (As stated in Appendix I).
 - 12.5 Revisional surgery related to gastric banding/ balloon can be performed in this center, however, no conversion to stapling procedure is allowed in these centers.
13. Health care facility undertake bariatric surgery should maintain a volume of 25 cases per year.

Appendix III: Records of quality indicators

Indicator within 30 day of procedure	Readmission rate% (within 30 days of surgical procedure)	Re-operation rate (within 30 days of surgical procedure)	Complication rate include major* & minor** (within 30 days of surgical procedure)	Extended Length of Stay (LOS) > 7 days of procedure	Death rate% (within 30 days of surgical procedure)	Follow up rate *** (post 1, 6, 12, 24 month of surgical procedure)
Patient with low risk preformed in normal risk patient						
Surgeries performed in high risk patients ****						
Revisional surgeries						

***List of major complications includes:**

- Venous thrombotic event (VTE) requiring administration of anticoagulant or intervention, such as embolectomy, inferior vena caval (IVC) filter
- Anastomotic leak requiring reoperation,
- Percutaneous drainage of abscess, stent placement or conservative management with parenteral nutrition and nothing per os (NPO),
- Gastrointestinal hemorrhage requiring transfusion or intervention,
- Small bowel obstruction requiring reoperation,
- Bowel perforation requiring reoperation,
- Trocar site hernia requiring reoperation
- Myocardial infarction
- Cerebrovascular accident
- Renal failure requiring dialysis,
- Respiratory failure requiring intervention such as intubation,
- Chronic nausea and vomiting not responsive to conservative management and requiring total parenteral nutrition (TPN),
- Gastric sleeve stenosis/obstruction requiring revision to a gastric bypass,

- Surgical site infection (superficial, Deep, or organ space) requiring debridement or washout in the operating room or percutaneous intervention,
- Small bowel stenosis, stricture or obstruction requiring revision of the jejunojejunostomy.

**** List of minor complications includes**

- Marginal ulcer diagnosed with upper endoscopy,
- Anastomotic stricture requiring endoscopic dilation,
- Nausea and vomiting requiring intravenous fluids (IVF) but not TPN,
- Acute renal failure managed with IVF without the need of dialysis,
- Gastrointestinal ileus managed conservatively,
- Incisional hernia (diagnosed during routine follow-up),
- Trocar site surgical site infection managed with drainage and local wound care,
- Negative re-exploration (e.g., diagnostic laparoscopy to rule out leak or for unexplained tachycardia),
- Urinary tract infection managed with antibiotics,
- Dehydration requiring IV hydration as an inpatient,
- Vitamin or mineral deficiency requiring IV supplementation (e.g., severe anemia requiring IV iron infusion or severe vitamin B12 requiring vitamin B12 injections or symptomatic thiamine deficiency requiring IV thiamine),
- Nephrolithiasis,
- Symptomatic cholelithiasis.

Facilities or Multi-disciplinary teams that provide the bariatric surgery should follow the patient post-surgery for a minimum of 2 years, in accordance to the following intervals (1, 6, 12, 24 months). An evidence of two attempts to call the patient is required from the facility per each visit

****** High risk patients: BMI>50, H/O Venous Thromboembolic Event (VTE) , sever OSA, Poor functional status, H/O of Myocardial Infarction(MI) or Percutaneous Coronary Intervention (PCI), H/O end organ damage or transplantation, Age more than 55 years.**

References:

1. De Luca, M., Angrisani, L., Himpens, J., Busetto, L., Scopinaro, N., Weiner, R., . . . Shikora, S. (2016). Indications for surgery for obesity and weight-related diseases: Position statements from the international federation for the surgery of obesity and metabolic disorders (IFSO). *Obesity Surgery*, 26(8), 1659-1696. doi:<http://dx.doi.org.ezproxy.uaeu.ac.ae/10.1007/s11695-016-2271-4>
2. Dixon, J. B., Zimmet, P., Alberti, K. G., & Rubino, F. (2011). Bariatric surgery: an IDF statement for obese Type 2 diabetes. *Diabetic Medicine*, 28(6), 628-642. doi:10.1111/j.1464-5491.2011.03306.x
3. Dubai Health Authority . (2017). DHA Standards for bariatric sugery services. Retrieved November 19, 2017, from [https://www.dha.gov.ae/Documents/HRD/DHA%20Standards%20for%20Bariatric%20Surgery%20Services%20-%202016\[1\].pdf](https://www.dha.gov.ae/Documents/HRD/DHA%20Standards%20for%20Bariatric%20Surgery%20Services%20-%202016[1].pdf)
4. Fried, M., Yumuk, V., Oppert J, M., Scopinaro, N., Torres A, J., Weiner, R., . . . Frühbeck, G. (2013). Interdisciplinary European Guidelines on Metabolic and Bariatric Surgery. Retrieved August 14, 2017, from <https://www.karger.com/Article/FullText/355480>
5. Health net . (2017, October). List of Investigational Procedures. Retrieved November 27, 2017, from <https://www.healthnet.com/static/general/unprotected/pdfs/national/policies/InvestigationalProcedureList.pdf>
6. International, C. O. (2008, December). IPEG guidelines for surgical treatment of extremely obese adolescents. Retrieved August 14, 2017, from <https://www.ncbi.nlm.nih.gov/pubmed/19105664>
7. Kim, Julie J. et al. "ASMBS updated position statement on insurance mandated preoperative weight loss requirements." *Surgery for Obesity and Related Diseases*, Volume 12, Issue 5, 955 – 959
8. Kominiarek, M. A., Jungheim, E. S., Hoeger, K. M., Rogers, A. M., Kahan, S., & Kim, J. J. (2017). American Society for Metabolic and Bariatric Surgery position statement on the impact of obesity and obesity treatment on fertility and fertility therapy Endorsed by the American College of Obstetricians and Gynecologists and the Obesity Society. *Surgery for Obesity and Related Diseases*, 13(5), 750-757. doi:10.1016/j.soard.2017.02.006.
9. Lim, B. (2017, February 15). Bariatric operations for management of obesity ... Retrieved December 27, 2017, from <https://www.bing.com/cr?IG=3B51B9D3A0224468A98AAD3C673118C8&CID=166A038726126EB6187F08E227BD6F1C&rd=1&h=mJVH9ubiBB2vUGG2lgGaiCh7LzrWlhCQXaD-TBAQdwM&v=1&r=https%3a%2f%2fwww.uptodate.com%2fcontents%2fbariatric-operations-for-management-of-obesity-indications-and-preoperative-preparation&p=DevEx,5068.1>
10. Mahawar, K. K., Himpens, J., Shikora, S. A., Chevallier, J., Lakdawala, M., Luca, M. D., . . . Small, P. K. (2017, December 14). The First Consensus Statement on One Anastomosis/Mini Gastric Bypass (OAGB/MGB) Using a Modified Delphi Approach. Retrieved January 18, 2018, from <https://doi.org/10.1007/s11695-017-3070-2>

11. Melissas, J. (2007, November). IFSO Guidelines for Safety, Quality, and Excellence in ... Retrieved August 14, 2017, from <http://www.bing.com/cr?IG=C1C43CB29BCB4DA5B893DF94CD9BE7AD&CID=37C563F2843261800CD0692C853460A8&rd=1&h=J9ohuPqcP4HndDAZu6qL5XLwl5f1noPmikncbR8EFVc&v=1&r=http%3a%2f%2flink.springer.com%2fcontent%2fpdf%2f10.1007%2fs11695-007-9375-9.pdf&p=DevEx,5037.1>
12. National institute for health care and excellence . (2014, November). Obesity: identification, assessment and management. Retrieved August 14, 2017, from <https://www.nice.org.uk/guidance/cg189/chapter/1-recommendations>.
13. Singhal, R., & Welbourn, R. (2016). Bariatric Surgery Data Management and Reporting Worldwide. *Obesity, Bariatric and Metabolic Surgery*, 563-568. doi:10.1007/978-3-319-04343-2_60
14. Thorell, A., MacCormick, A. D., Awad, S., Reynolds, N., Roulin, D., Demartines, N., Lobo, D. N. (2016, September). Guidelines for Perioperative Care in Bariatric Surgery: Enhanced Recovery After Surgery (ERAS) Society Recommendations. Retrieved August 14, 2017, from <https://www.ncbi.nlm.nih.gov/pubmed/26943657>
15. Timothy Garvey, W., Mechanick, J., Brett, E., Garber, A., Hurley, D., Jastreboff, A., . . . Plodkowski, R. (2016, July). AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS. Retrieved November 11, 2017, from <https://www.aace.com/files/final-appendix.pdf>
16. Yumuk, V., Tsigos, C., Fried, M., Schindler, K., Busetto, L., Micic, D., . . . Obesity, O. B. (n.d.). European Guidelines for Obesity Management in Adults. Retrieved August 14, 2017, from <https://www.ncbi.nlm.nih.gov/pubmed/26641646>.