Guidelines for Bariatric Surgery in Jordan
The Jordanian Society for Obesity Surgery (JSOS)

These are the recommendations for surgeons and service providers in Jordan which have to be followed to work at the international standard

1. Purpose

This standard aims to ensure the delivery of quality and safe clinical care for weight management and obesity. It recommends care pathways in support of patient needs, including where required surgical interventions, developed in accordance with international evidence based best practices.

2. Scope

This standard applies to all Healthcare Facilities and Professionals licensed by Health Authority in Jordan. This standard refers to patients requiring life style, clinical and surgical interventions (bariatric Surgical procedures).

3. Duties for Healthcare Providers

- All health care providers, including healthcare facilities and professionals, must:
  - Provide clinical services in accordance with the requirements of this Standard, and the relevant Clinical Care Standards and ensure that their practices reflect internationally recognized evidence based clinical care pathways;
  - report and submit data in accordance with the Data Management.
  - Document and monitor quality and safety of clinical care and outcomes of surgical intervention for weight management performed on patients

4 Standard 1: Bariatric Surgery Patient Eligibility Criteria

The provider must ensure that bariatric surgery delivered to patients who fulfill the following criteria:

- meet the defined criteria in Appendices 1
  - have undertaken all other clinical interventions, with unsuccessful
  - outcomes as specified in Appendices1
  - be generally fit for anaesthesia and surgery;
  - commit to undertaking long-term follow-up by a specialist obesity management provider.

- The minimum requirements for documentary evidence as specified in Appendix 1 must be satisfied; Where a patient may have undertaken non-clinical weight management program, such as structured life style modification including exercise, sports and/or nutrition
- Facilities Licensed must adhere to the requirements in Appendix 2
- All surgical procedures must be recorded in accordance with the data fields provided in Appendix 3
- and records must be kept on the patient's file;
- Post-operative follow up and recording of patient outcomes must be recorded in patient notes in accordance with Appendix 4

5. Standard 2: Service specifications

a. The Healthcare Provider must fulfill the following requirements:
   i. Ensure that the multi-disciplinary teams comprise of all Health Authority licensed personnel necessary to deliver services in accordance with this standard, and that bariatric surgeons satisfy the requirements of Appendix2
   ii. Only Health Authority licensed hospital (general and specialized) facilities are eligible to provide bariatric surgery for adults.

iii. Provide a range of integrated clinical services including surgical intervention for patients seeking weight management and/or obesity care in accordance with this standard including the requirements of Appendices1,2,3,&4.
iv. Have available and maintain all equipment, support, intervention needs and supplies necessary for treatment and patient care,
v. Patient education - The provider or the Surgical team must deliver culturally and socially relevant patient education and information regarding the treatment and care (pre and postoperatively as detailed in Appendix2. Patient informed consent must be sought and documented

Appendix1: Criteria for eligibility and documented evidence for approvals for Bariatric Surgery

Adults over 18 years or over		
Criterion	Requirements for eligibility forbariatricsurgery	Documentary evidence
Clinical indicators	1. BMI>50kg/m^2(no comorbidities or evidence of failed non-invasive interventions are necessary); OR 2. BMI40-50kg/$m^2$with evidence of failed non-invasive interventions, weight loss and pharmacotherapy(no comorbidities are necessary) OR 3. BMI 35-39.9 kg/m^2 with evidence of failed non-invasive interventions, weight loss and pharmacotherapy and at least 2comorbidities* OR 4. BMI 30-34.9 kg/m^2 with evidence of failed non-invasive interventions, weight loss and pharmacotherapy and at least 3 comorbidities	1. Medical report including: i. measure of height, weight and BMI ii. personal medical history iii. family history of cardiovascular disease(CVD) iv. blood pressure v. lipid profile vi. diabetes screen vii. formal CVD risk score viii.HbA1cix. waist hip ratio x. sleep study, HIV, hepatitis-serology (if indicated)
Weight Loss attempts	1. Six months of lifestyle modification using a comprehensive, structured program has not resulted in an average weight loss ≥0.5Kg/week over 6months; and	1. Report from a certified dietitian 2. Evidence of the delivery of a structured program for life style modification

Service/consultation	1. Weight loss attempts must have been delivered by a Health Authority licensed professional specializing in weight management. 2. All patients must have received counseling from a multi-disciplinary specialist team including as a minimum a physician specializing in weight management or nurse, certified dietitian and psychologist, who should perform a risk-benefit analysis. 3. Bariatric Surgery must only be undertaken by a consultant level surgeon with expertise in the field of bariatric surgery or a surgeon with adequate training in the field and in accordance with the requirements of this standard (Appendix3). 4. The consent process must be undertaken by the consultant level bariatric surgeon or a specialist level bariatric surgeon; risks and benefits must be fully explained, including the short, medium and long term risks. Signed consent must be kept on patient records. 5. The bariatric centre must offer follow-up post-surgery with a multi-disciplinary team including as a minimum a specialist bariatric surgeon, a nurse, a dietician and a support group, all with specialization in bariatric procedures and interventions.	1. Report from certified Dietitian 2. Report of support from a psychologist(if required) 3. Report from the bariatric surgeon with justifications of the requirement for bariatric surgery. 4. The signed consent form including evidence of explanation of risks and benefits of bariatric surgery in line with the Consent Policy available. 5. Evidence of the designated specialized bariatric team who will undertake post-surgery follow-up
Young adults(post-pubertal–18years)		
Criterion	Requirements for eligibility for bariatric surgery	Documentary evidence
Clinical Indicators	BMI ≥ 99th Centile** or BMI > 40; AND There is evidence of co-morbidity including but not limited to :insulin resistance , hypertension, sleep apnea, dyslipidemia, or pseudotumor cerebrii; AND There is a significant health risk as a direct result of the obesity. Inclusion criteria (must meet all): 1. Young adult candidates for bariatric surgery should be morbidly obese (defined by the World Health Organisation as a body mass index >40)AND 2. Have comorbidities related to obesity that might be remedied with durable	1. Medical report/pre-operation assessment including: i. measure of height, weight and BMI ii. exclusion of a primary cause for the obesity including endocrine and genetic disorders iii. family history of cardiovascular disease(CVD)

	weight loss AND 3. Have attained a majority of skeletal muscle (generally greater than 13 years of age for girls and 15 years of age for boys) AND 4. Be at Tanner development stage 4 or greater AND 5. Have a history of obesity for at least 3 years including documented failed attempts and diet and medical management of obesity over at least 6months AND 6. All other attempts at behavior modification have failed to achieve weight loss goals over a six month period AND 7. Express willingness to follow program requirements which includes an assent form, having the individual's legal guardian sign a consent form; completing 1-2 week, 6 week, 3 month, 9month, 12month, and every 6month follow up visits for a total of five years, and completing all clinically required laboratory and diagnostic tests AND 8. Agreed to avoid pregnancy for a year post operatively AND 9. Agreed to adhere to nutritional guidelines postoperatively AND 10. Has a supportive family environment AND 11. 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. Exclusion criteria: 1. History of clinical disease that may prohibit weight loss surgery, including, but not limited to: congenital or acquired intestinal telangiectasia; Crohn's disease or ulcerative colitis; severe cardiopulmonary disease or severe coagulapathy; hepatic	iv. family history of obesity v. lipid profile vi. diabetes screen vi. fasting glucose andHbA1c vii. liver function tests viii. complete blood count ix. thyroid function tests screening form iron xi. sleep study for patients with symptoms of obstructive sleep apnoea. xii. Bone age assessment considered for younger patients to document the degree of skeletal maturity xiii. Cardiac and pulmonary evaluation xiv. Endocrine evaluation xv. gastro-oesophageal reflux disease xvi. other tests if relevant (e.g. pregnancy)Evide nce of the delivery of a structured program for lifestyle modification

	insufficiency or cirrhosis. Patients with autoimmune connective tissue disorders. 2. Pregnancy or intention of becoming pregnant in the next 12 months. 3. Presence of uncontrolled psychiatric disease or patient immaturity which would compromise cooperation with the clinical protocol. 4. Chronic use of aspirin and/or non-steroidal anti-inflammatory medications and unwillingness to discontinue the use of these concomitant medications. 5. Unwillingness to Comply with clinical protocol.	
Weight Loss attempts	a comprehensive ,structured multi-disciplinary protocol including a structured behavior modification programme***	1. Report from a certified dietitian 2. Evidence of the delivery of a structured program for life style modification
Service/consultation	1. Weight loss attempts must have been delivered by a licensed specialist. 2. The child must have had consultation and counseling from a multi-disciplinary team with expertise in childhood obesity, child psychologist, pediatrician and a bariatric surgeon. 3. The assessment for surgery (or medication)must only be made by a consultant level bariatric surgeon. 4. The consent process must be undertaken by the consultant level bariatric surgeon and risks and benefits fully explained, including	1. Report from a Licensed dietician with child/adolescent experience 2. Report from psychologist 3. Report from a bariatric surgeon with justifications of the requirement for surgery

	the short, medium and long terms risks. 5. The bariatric centre must offer follow-up post-surgery with a multi-disciplinary team including as a minimum a specialist bariatric surgeon, a specialist bariatric nurse, a specialist bariatric dietician and a specialist bariatric support group.	5. The signed consent form including evidence of explanation of risks and benefits of bariatric surgery in line with the consent policy available. 6. Evidence of the designated specialist bariatric team who will undertake post-surgery follow-up

*The major comorbidities whith evidence can be improved by losing weight include:

1. Type 2Diabetes
2. Non-alcoholic steastoepatitis (NASH)/ Hepaticatosis (fatty liver disease)
3. Lymph edema
4. Hypercholesterolemia
5. Sleep Apnea requiring continuous positive airway pressure(CPAP)
6. Family history of heart disease and patient's CVD risk>20%
7. Hypertension counts only if the patient meets one of the following criteria:

a. Requiring three antihypertensive drugs to control hypertension
b. Taking three antihypertensive drugs but hypertension not controlled
c. Taking fewer than three antihypertensive drugs, hypertension not controlled (>140/90),and unable to increase antihypertensive medication further due to clear contraindication or proven poor tolerance of additional medications

8. Asthma counts only if the patient meets at least one of the following criteria:

a. Attended ED within the last year with acute asthma exacerbation
b. Any previous admission to hospital ward with acute asthma exacerbation
c. Any previous asthma exacerbation judged near-fatal
d. Currently requiring significant corticosteroid treatment - ongoing inhaled corticosteroid treatment (i.e. BTS Step 2), or more than two courses of oral corticosteroid treatment in the last year

9. Currently requiring three or more classes of asthma medication (i.e. BTS Step3)
10. Brittle asthma
11. If asthma impedes the patient's ability to exercise to support weight loss

Appendix 2-Requirements for Providers and professionals undertaking Bariatric surgery

1. Housed in hospitals (General and specialized) and defined as providing all types of weight-loss operations for morbidly obese adult patients.
2. Accredit Bariatric Surgeons and ensure the requirements of Appendix 4 and 5 are met;
3. Demonstrate a risk based approach to bariatric surgery for high risk patients,
4. Have all necessary equipment Bariatric surgery instruments, items of furniture including, at least but not limited to: wheelchairs, operating room tables, surgical instruments, beds, radiology facilities such as CT scan, and other lifting devices specially designed and suitable for high risk, morbidly and super obese patients.
5. Have in place a formalized (written) process and patient record for the following:
    - Pre-operative consultation and assessment;
    - Pre operative counseling; to include psychological assessment, assessment of patient expectations, quality of life and potential complications;
    - Preoperative assessment of predicted difficulty of anesthetists intubation;
    - Patient selection and rationale guided by a multidisciplinary team decision;
    - Record of surgical procedure undertaken;
    - Pre-operative informed consent that takes place over two stages;
    - Post-operative bespoke patient education;
    - Post-operative bespoke dietary and exercise;
    - Post-operative bespoke psychological counseling and guidance; and
    - Post-operative patient follow up and validation of patient outcomes from baseline.

Appendix 3 – Monthly recording of surgical procedures

1. Gastric Band

Name of Clinician	Number of procedures	Readmission rate%	Leak rate %	Stenosis rate%	Other complications rate%	Death rate %	Mean relativeHbA1creduction %

NB: other complications include but not limited to intrabdominal bleeding, sepsis, obstruction, pulmonary embolism, abdominal compartment syndrome and vomiting± abdominal pain.

2. Sleeve Gastrectomy

Name of Clinician	Number of procedures	Readmission rate%	Leak rate %	Stenosis rate%	Other complications rate %	Death rate%	Mean relativeHbA1creduction %

NB:other complications include but not limited to intrabdominal bleeding, sepsis, obstruction, pulmonary embolism, abdominal compartment syndrome and vomiting± abdominal pain.

3. Roux-en-Y

Name of Clinician	Number of procedures	Readmission rate%	Leak rate %	Stenosis rate%	Other complications rate%	Death rate%	Mean relativeHbA1creduction %

NB: other complications include but not limited to intrabdominal bleeding, sepsis, obstruction, pulmonary embolism, abdominal compartment syndrome and vomiting± abdominal pain.

Appendix 4-Post-operative patient follow up and validation of patient outcomes from baseline

Patient ID	Procedure undertaken (banding, bypass or Gastrectomy)	Height, weight and BMI pre-op	Height, weight and BMI 1week postop	Height, weight and BMI 4weeks postop	Height, weight andBMI 3 months postop	Height, weight and BMI 6 months postop	Height, weight and BMI 12 months postop	Height, weight and BMI 24 months postop