



Non-Hospital Medical and Surgical  
Facilities Accreditation Program

STANDARD

Laparoscopic  
Adjustable Gastric  
Banding



## Preamble

In part, the following information has been adapted with permission from documents developed by the College of Physicians and Surgeons of Ontario and Alberta.

This document is intended for non-hospital medical/surgical facilities to ensure that best practices are incorporated into facility policies and procedures for the purpose of a bariatric surgery program acceptable to and approved by the College of Physicians and Surgeons of BC. Laparoscopic adjustable gastric banding (LAGB) is the only qualifying bariatric procedure approved for restricted Class 1 non-hospital facilities as specified by the College. This document is reviewed annually and revised periodically. In 2015, the document was updated to reflect the current standards for LAGB. This document is a standard of practice for non-hospital facilities.

Definitions pertaining to all Colled1 0 0 1 150.27 .0000092 0 612 72 reWhBT/

VTE Venous thromboembolism

## Glossary of terms

adult Persons 19 years of age or older. Confirms the rights of adults to make their own health-care decision, either independently or with support from family and friends. Adults can be given health care only with their consent (*BC's Adult Guardianship Laws: Supporting self-determination for adults in British Columbia*).

Aldrete scale Clinical scale used as criteria for patient discharge from PACU. The Aldrete scale scores the patient on mobility, respiratory status, circulation, consciousness, and [pulse oximetry](#).

anesthesiologist All licensed medical practitioners with privileges to administer anesthetics. The only route to specialist recognition in anesthesia in Canada is through the Royal College of Physicians and Surgeons of Canada's certification process. Physicians may be required to provide anesthesia services. CAS guidelines are intended to apply to all anesthesiologists in Canada. In the NHMSF setting only Royal College certified anesthesiologists may provide anesthesia services.

appropriateness The degree to which service is consistent with requirements and current best practice.

bariatric The field of medicine specializing in the treatment of obesity.

best practice An approach that has been shown to produce superior results, selected by a systematic process, and judged as exemplary, or demonstrated as successful. A best practice is a technique or methodology that, through experience, research and expert opinion has proven to reliably lead to a desired result.

child A patient 14 years of age or less.

class 1 facility Provides general anesthesia services.

college Professional regulatory body.

committee Non-Hospital Medical and Surgical Facilities Accreditation Program Committee.

comorbidity

competence	Guarantee that an individual's training, knowledge and skill are appropriate to the service provided and assurance that the training, knowledge and skill levels are regularly evaluated.
consent	Refer to BC's <i>Health Care (Consent) and Care Facility (Admission) Act</i> : <a href="http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96181_01">http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96181_01</a>
guideline(s)	An instructional guide or reference to indicate a course of action or appropriate options. They incorporate the most current evidence-based or consensus-based clinical information into a framework that promotes the best patient outcomes. They do not define a standard of care, but may inform the standard of care. They are not intended to replace the professional judgment of physicians.
overnight stay	Refer to Appendix E.
practitioner	An individual who practices a learned profession and supplies health-care services (e.g. physician, registered nurse).
policy	A principle or guideline that governs activities in a facility that employees are expected to follow.
protocol	Description of the steps to be taken in a procedure. Formal ideas, written plans and expectations concerning the actions of those involved in patient care.
qualified	Having the education, abilities, qualities, training, or certification to perform a particular job or duties.
regulated health-care professional	Applies to a health-care professional who is licensed and in good standing with their regulatory College.
standard	That which is established by authority as a model, criterion, or rule and serves as a basis for comparison. Authoritative statements that describe the responsibilities for which individuals are accountable. Reflect the values and priorities of the profession. An achievable level of performance against which actual performance is compared.
surgeon	A specialist certified by the Royal College of Physicians and Surgeons of Canada in a relevant surgical discipline.

## Bariatric program standards

### Medical director and facility requirements

The medical director must make application in writing to the College for approval to administer a bariatric program for LAGB procedures. Approval is contingent on the completion of an on-site visit and confirmation of the following requirements:













names of physicians and other health-care professionals directly involved in patient care  
procedure performed  
informed consent  
preoperative history and physical  
consultations as indicated  
preadmission anesthetic record  
record of allergies and medications  
laboratory and/or diagnostic testing as indicated by the patient's medical status, drug therapy or nature of the procedure  
anesthetic record  
operative report  
operative nursing record  
post-anesthesia recovery record  
discharge record

patients with confounding psychiatric issues (e.g. active psychosis, current moderate-severe untreated depression)

patients with confounding psychosocial factors (e.g. recent or current substance/alcohol abuse, disturbed eating habits, limited social support, unrealistic expectations of surgery)

Appropriate patients for LAGB surgery in a NHMSF:

only ASA 1 and 2 patients and selected ASA 3 patients with no significant cardiac or pulmonary comorbidities

age between 19 and 65 years

BMI > 30 and < 35 with at least one severe comorbidity related to their obesity (e.g. heart disease, diabetes)

BMI > 35 and < 50 (maximum weight of 400 lbs)

patient has been overweight for at least five years

mild untreated OSA requiring low dose oral opioids post-op

mild to moderate treated OSA requiring low dose oral opioids post-op

selected severe OSA appropriately treated and compliant with CPAP

patient must be ambulatory

Each patient must be carefully screened and the following criteria reviewed prior to surgery by the designated director of the bariatric program and the bariatric nurse coordinator:

a medical interview with the patient

a physical examination relative to anesthetic aspects of care and review of previous anesthesia records

record of blood pressure, heart rate, respiration status and quality, oxygen saturation and temperature

a review and ordering of diagnostic tests

ECG, CBC, electrolytes, liver function tests are mandatory



heating ventilation and air conditioning systems meet CSA standards and documentation is provided to the College

standard OR lights, suction and temperature controls are in place

emergency power and lighting is available for minimum of four hours and tested weekly

that emergency cart and difficult intubation equipment is immediately available

adequate electrical outlets are available

non-flammable medical gas piping system complies with BC building codes and is serviced annually

all equipment is CSA approved and checked annually by a biomedical engineer

that OR theatre is adequately staffed from the start to finish of each case

that "surgical safety checklist" (briefing, timeout and debriefing) is completed and recorded on OR record

that all intraoperative charting and surgical counts are completed and signed by the appropriate health-care professionals

that all surgeons complete a detailed operative report

#### e. Post-anesthesia recovery unit

The regulated health-care professionals managing the patient care must ensure:

there is adequate number of patient stations equipped with monitoring equipment which includes:

- o ECG monitor
- o suction
- o oxygen source with mask and/or nasal cannula
- o bag-valve-mask device
- o intravenous supplies
- o medications and narcotics
- o emergency light source
- o body warming device

adequate space exists to allow for free movement of staff and emergency equipment access on both sides of the patient stretcher

during the patient recovery phase a registered nurse qualified and trained in recovery room procedures remains in continuous attendance to the patient

there is ongoing patient assessment and documentation of every patient which includes:



- respiration rate and airway patency
- heart rate evaluation
- blood pressure
- oxygen saturation by pulse oximetry
- colour
- level of consciousness
- activity

hand-washing station and/or alcohol rub dispensers are easily accessible to ensure hand washing between patients

#### f. Patient discharge

1. Discharge criteria must be met prior to discharge from the patient from the Facility e.g. modified Aldrete score (see Appendix C).
2. The patient and/or guardian/responsible adult will be instructed in the after care of the patient. Verbal and written discharge instructions will be given to the patient and/or responsible adult and must include:
  - when to resume taking medications taken before procedure
  - new prescriptions
  - wound care
  - diet and activity restrictions, additive effects of alcohol and other sedative drugs

## g. Emergency protocols

### 1. Overview

In facilities doing LAGB there may be emergencies that relate to the airway, cardiac function and to the management of unexpected findings during the laparoscopy or intra-abdominal injuries that ensue during the procedure. The facility must have appropriately trained personnel to deal with these emergencies and have the appropriate equipment to perform life-saving procedures.

### 2. Emergency patient care

Protocols for the contact of EMS and patient transfer to a hospital must be published, posted and regularly reviewed.

### 3. Difficult airway management

Facility must be capable of and appropriately equipped to safely and effectively deal with difficult airway problems. The equipment necessary includes flexible bronchoscope with suction capabilities, glide scope and a difficult intubation tray.

### 4. Emergency equipment and supplies

- cardiac monitor with display

- defibrillator

- means to monitor body temperature

- emergency and resuscitative medication as per College guidelines for Class 1 facility (see Appendix F)

- two functioning laryngoscopes appropriate for obese patients

- endotracheal tubes, laryngeal masks, stylets, airways and facemasks in a selection of sizes appropriate to the patient

- 100% oxygen source (two E tanks available) and supplies

- positive-pressure breathing device

- portable suction and suction catheters (tonsil and deep)

- cricothyrotomy kit

- pulse oximeter with audible monitor

- CO<sub>2</sub> monitor

- stethoscope

- CPR backboard

- emergency record document

## Magill forceps

## h. Medication management

Controlled substances/narcotics shall be managed in a manner that permits full auditing of the substances from acquisition through to patient administration and wastage.

## i. Safety

1. All equipment and supplies must be appropriate, CSA approved and calibrated according to the manufacturer's recommended standards.
2. All equipment must undergo annual inspection and maintenance by qualified personnel i.e. biomedical engineer. Records indicating conformity to regulations and inspection and maintenance must be retained by the facility.
3. Emergency mock drills must be performed at least every six months which should include, but are not limited to, cardiac arrest, difficult airway management, anaphylaxis, hypovolemia, unresponsiveness, acute stroke and seizure. All staff must participate in mock drills with attendance and specified drills practised documented.

## j. Physical space

Facilities must meet AIA bariatric design guidelines (see Appendix D) which include:

corridor widths

doorway widths

bathroom toilets and sinks

adequate space in facility for the health team to deliver safe, private and efficient patient care in all patient areas

mandatory access to facility by emergency medical services and fire department

## k. Infection prevention and control management

"routine practices" shall be employed in the handling of all patients, care items and medical devices

sufficient hand-washing sinks shall be available and hand-washing protocol posted as a visible reminder of the importance for staff to wash their hands

appropriate personal protective devices shall be employed by all staff

sterile technique shall apply as appropriate to procedure performed

all sharps devices must be handled appropriately and disposed of in a dedicated biohazard puncture resistant container (see WorksafeBC Guideline at [www.worksafebc.com](http://www.worksafebc.com) – Reference OSHR 6.36(1))

single-use medical devices (e.g. syringes) must not be reused





iii. Preventing deep vein thrombosis (DVT) and pulmonary embolism (PE)

The following steps are taken to prevent DVTs or PEs:

- requiring patients to stop estrogen-containing medications one month before surgery

- administering 4,000 U of low molecular heparin subcutaneously one hour prior to anesthesia induction

- placing pneumatic compression devices on the lower extremities of the patients during surgery

- allowing for rapid ambulation post-surgery by minimizing post-operative nausea, vomiting and pain through the administration of appropriate medications, as mentioned earlier

These measures have been shown to greatly reduce risk.<sup>2, 3</sup>

iv. Anesthesia management

Short-acting anestheticBT/F1 11 Tf4gs dand p reW\*F1 11 Tf1 0 0 1 134.9 481.95 Tm0 g0 G[(-)] TJETC

3. Montgomery KF, Watkins BM, Ahroni J. Outpatient laparoscopic adjustable gastric Banding in super-obese patients. *Obesity Surgery*. 2007;17;711-716.
4. Watkins BM, Montgomery KF, Ahroni JH, Erlitz MD, Abrams RE, Scurlock JE. Adjustable gastric banding in an ambulatory surgery centre. *Obesity Surgery*. 2005;15:1045-1049.
- 5.

## Appendix B

### American Society of Anesthesiologists (ASA)

#### Physical Status Classification System

Only patients at Categories 1 and 2 risk level as defined by the American Society of Anesthesiologists should normally be accepted in the facility. However, risk level Category 3 patients may be treated there if the patient's disease is not expected to be affected by the anesthetic.

ASA 1 A normal healthy patient



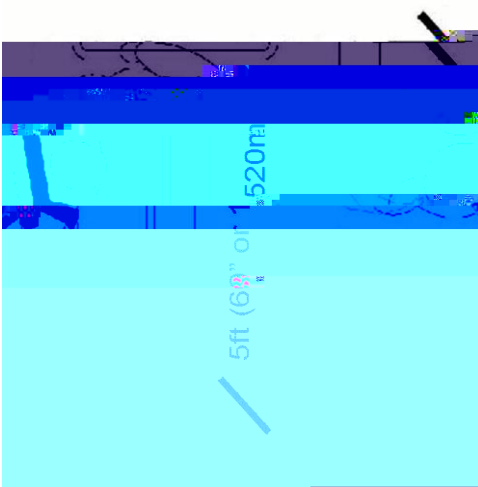








## Toilet rooms



Provide floor-mounted toilets with a drop weight rating of 700 lbs (to accommodate an impact factor of 1.4 for a 500 lb patient) and a clearance of 5 ft (60" or 1,520 mm). Allow for staff assistance on two sides of the toilet or shower.

Provide wall-mounted sinks with a rating of 300 lbs (floor-mounted sinks interfere with wheelchairs).

Opt for open showers with a floor drain to allow for easier staff assistance and provide wall-mounted grab bars. Ensure any wall with a wall-mounted fixture is reinforced to meet or exceed the rating.

Source: The American Institute of Architects. (2004). Planning and Design Guidelines for Bariatric Healthcare Facilities. Found online at:

[http://www.aia.org/nwsltr\\_print.cfm?pagename=aah\\_jrnl\\_20061018\\_award\\_winner](http://www.aia.org/nwsltr_print.cfm?pagename=aah_jrnl_20061018_award_winner)

## Appendix E

See Overnight Stay Guideline at <https://www.cpsbc.ca/files/pdf/NHMSFAP-Overnight-Stay-Guideline.pdf>.

## Appendix F

See the following documents:

Emergency Cart Medication and Equipment – Class 1

<https://www.cpsbc.ca/files/pdf/NHMSFAP-AS-Emergency-Cart-Class-1.pdf>

Malignant Hyperthermia Standard

<https://www.cpsbc.ca/files/pdf/NHMSFAP-Malignant-Hyperthermia-Standard.pdf>







## Revision history

Version no.	Version date	Summary of changes
1.7	2019-02	Updated Section II Practitioner's qualifications to be congruent with the change made in 2014-03
1.6	2017-12	Program name change
1.5	2014-03	Updated Medical Director and Facility Requirements, item 4b from "second qualified general surgeon assisting who surgical assist"
1.4	2013-03	Document tith(03] TJETQC /P0.005 Tc[(2019)] TJETQq

1.3	2012-01	<p>Edits to physical space requirements to include CSA Z8000, page 5</p> <p>Edits to points 3 and 4 under Appropriate patients for LABG surgery in a NHMSF, page 11</p> <p>Edits to Operating Theatres and Equipment requirements, page 14</p> <p>Changed "Emergency Airway Management" to "Difficult Airway Management", page 17</p> <p>Removed introductory paragraph under Sterile Processing Management, page 19</p> <p>Updated link to Ministry of Health document, page 19</p> <p>Removed ASA 5 in Appendix B ASA Physical Status Classification System, page 25</p> <p>Edits to Appendix C Modified Aldrete Scoring System, page 26</p> <p>Appendix E (hyperlink), page 32</p> <p>Update to Appendix F, page 33</p> <p>Edits to References, pages 34-36</p>
1.2	2010-11	<p>Edits to point 3 of screening criteria, page 12 (as directed by the NHMSFAP Committee)</p>
1.1	2010-07	<p>Edits to last sentence, point 5 of screening criteria, page 13</p>
1.0	2009-07	<p>Initial final version</p>