Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Adjustable Gastric Band Management Practice Guidelines

This procedural document supersedes: PAT/T 47 v.5 – Adjustable Gastric Band Management – Practice Guidelines

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Executive Sponsor(s):	Medical Director
Author/reviewer: (this version)	Katie Kirk - Clinical Nurse Specialist Bariatric Surgery
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Target audience:	Trust wide - Medical, Nursing and Midwifery staff

Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed **without change**, this information will still need to be recorded although the version number will remain the same.

Version	Date Issued	Brief Summary of Changes	Author
Version 5	November 2022	• Updated training and support • Updated introduction	K Kirk
Version 4	June 2019	• Advanced care practitioner role included in duties and responsibilities • C-CAST training package for " Removal of fluid from the gastric band " included in the guidelines • The use of sterile gloves added to list of equipment	K Kirk
Version 3	27 September 2016	• Format style updated. • Introduction updated • Specialist Dietitian included in duties and responsibilities • Statement regarding radiological band adjustments updated • Training and support section updated to include specialist Dietitian • Adjustment guidelines for Apollo Lap-band AP included	K Kirk
Version 2	16 October 2013	• Title change to ease search. • Format style updated. • Statement regarding fluid removal in pregnancy updated. • Dietary advice following band adjustment updated.	K Kirk

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1. INTRODUCTION

In 2014 the National Institute for Health and Clinical Excellence (NICE) published guidance on how obesity could be managed in England. Its document titled 'Obesity: identification, assessment and management' recommends various treatment options. One recommended treatment for adults with severe morbid obesity is bariatric surgery, although the patient must fulfil the set criteria stipulated by NICE (2014).

Bariatric surgery offers a long-term solution for the problem of severe morbid obesity with the major benefits of sustained weight loss and the improvement and/or resolution of numerous obesity related health conditions. The Adjustable Gastric Band is one type of surgery recommended and since its introduction in 1993 the Adjustable Gastric Band has gained a key role as a first line treatment for obesity. It works by decreasing appetite and creating early satiety (a feeling that you are not hungry) with only a small amount of food. The gastric band is a ring placed around the top part of the stomach. There is almost no stomach above the band. When eating, a person will get a sense of fullness from a small amount of food. This feeling of satiety is induced by the band pressing onto the surface of the stomach and stimulating the nerves leading to the brain. The band is attached to tubing that is connected to a port. In most cases the port is attached to the abdominal muscles under the skin. Fluid can be added (by injection) to the port to increase and decrease the sense of satiety, as the band is tightened and loosened around the stomach. The key feature of the adjustable gastric band is its adjustability and its success directly depends upon this (Ponce, 2007).

2. PURPOSE

The aim of these guidelines is to provide a framework for the clinical adjustments of the gastric band in line with best practice.

The gastric band is a surgical option to assist in the treatment of morbid obesity.

The objectives are:

- To ensure safe and effective clinical adjustments to the gastric band.
- To ensure infection prevention and control measures are observed throughout adjustments.
- To sustain the safety and comfort of the patient.
- To ensure that the level of adjustment is sufficient to achieve a prolonged sensation of satiety.
- To assist with a steady and progressive weight loss (Favretti, O'Brien and Dixon, 2002 and Thomusch and Karcz, 2012).

3. DUTIES AND RESPONSIBILITIES

- **Matrons:** are accountable for safeguarding patients through high quality and effective practice. They are responsible for ensuring implementation within their area by ensuring appropriate care, education and equipment is provided.

- **Clinical Nurse Specialist and Specialist Dietitian:** (for bariatric surgery) are responsible for keeping an ongoing record of all patients within the service who have had gastric band surgery. The CNS and Sp Dietitian perform band adjustments in both radiology and clinic settings, adhering to best practice at all times. The CNS has a role in educating medical and nursing staff about the adjustable gastric band and its management.

- **Wards and Department Managers:** are responsible for the care and appropriate placement of the bariatric patient whilst in their area. They are also responsible for the equipment needs of an individual patient.

- **Lead Nurse Practitioner/Advanced Care Practitioners and Surgical Nurse Practitioners**: The Lead Nurse Practitioner is responsible for identifying Advanced Care Practitioners (ACP's) and Nurse Practitioners working in an environment where there is a need for emergency gastric band deflation. Before deemed competent at removing fluid from the gastric band the practitioner must complete the C CAST training package 'removal of fluid from the adjustable gastric band'.

- **Consultant Medical Staff:** The named Consultant leads the management plan for the patients care.

- **Site Co-ordination Teams and Bed Managers:** are responsible for ensuring patients are placed in accordance with these guidelines, and for escalating any situations where safe placement cannot be achieved.

- **Accident and Emergency Department**: When a patient with a problematic adjustable gastric band presents in the A&E department the assessing Doctor/Practitioner is responsible for referring the patient to the bariatric team. The Clinical Nurse Specialist and Specialist Dietitian are contactable through the switchboard. Out of hours or when the team are not contactable then the surgical on call team must be contacted.

4. PROCEDURE

General guidance

Clinical adjustments involve making adjustment decisions on the basis of weight loss, appetite, restriction and symptoms.

Indication for adding fluid to the gastric band device:

- Inadequate weight loss

- Rapid loss of satiety after meals
- Increased volume of meals
- Hunger between meals

Adjustment not required:

- Adequate rate of weight loss
- Eating a reasonable range of food
- Tolerating textured food
- No negative symptoms or complications

Indication for removal of fluid from the gastric band device:

- Vomiting, heartburn, reflux into mouth
- Coughing spells, wheezing and choking, especially at night
- Difficulty coping with broad range of food and texture
- Difficulty tolerating a textured diet
- Maladaptive eating behaviour

(Favretti, O'Brien and Dixon, 2002, Kirchmayr et al., 2004 and Ponce 2007)

For adjustment guide see Appendix 1

Preparation

- Prior to performing a band adjustment the practitioner must gain consent from the patient (Consent to Examination or Treatment Policy – PAT/PA 2).

- Always use a non-coring needle e.g., Huber needle or Braun Surecan needle (Schauer, Schirmer and Brethauer, 2007 and Thomusch and Karcz 2012).

- Local anaesthetic is not necessary (Favretti, O'Brien and Dixon, 2002).

- An X-ray may be required to localise and mark the port.

- The maximum recommended amount of fluid that a gastric band accommodates depends on the band type.

- The band should be deflated during the presence of acute or serious illness or a need for major surgery (Ponce 2007).

- Following band adjustment the patient must drink a glass of water before leaving the clinic to ensure that they do not have outlet obstruction.

- If fluid is added to the band, advise the patient to stay on fluids only, for two days post band adjustment, pureed diet for a further day, progressing to solid food by day four.

- Radiological adjustment is required for the first band adjustment, which involves making a decision that also incorporates the additional information from a barium swallow

examination. Radiological adjustment is also undertaken when the practitioner requires the extra visual support for a band adjustment, this is seen as 'gold standard' practice (Thomusch and Karcz 2012).

4.1 Equipment for band adjustment

- Trolley
- Non-coring needle
- Drawing up needle
- 10ml syringe x2
- Sterile normal saline
- 2% chlorhexidine in 70% Isopropyl alcohol swabs
- Sterile examining gloves
- Sterile gauze swabs
- Sharps bin

4.2 The Procedure

- Clean hands using alcohol had rub
- Introduce self and correctly identify patient. Gain consent by informing patient of procedure and rationale.
- Wash hands with soap and water and dry thoroughly.
- Don apron and disposable gloves.
- Clean trolley using hospital approved detergent/disinfectant agent.
- Ensure all equipment is gathered and placed on bottom shelf of trolley.
- Remove gloves and apron.
- Wash hands and don apron.
- Position patient supine on the examination couch with abdomen exposed.
- Palpate the port site (usually fixed securely on the surface of the anterior rectus sheath).
- Clean site with 2% chlorhexidine in 70% Isopropyl alcohol swab for 30 seconds and allow it to dry for 30 seconds.
- Clean hands using alcohol gel.
- Apply sterile gloves.
- **If adding fluid to the band:** use syringe and drawing up needle to draw up required normal saline solution, detach and dispose of needle in sharps bin.
- Attach non-coring needle to 10ml syringe and remove needle guard.
- Anchor port between two fingers.
- Enter port through the skin with the non-coring needle at 90 degrees. Stop when you feel the metal of the port scratch against the tip of the needle.
- If fluid already in the band aspirate into syringe **(If just for band deflation, remove the desired amount of fluid and remove the needle and syringe).**
- If for band inflation, aspirate band fully then refill adding the required extra solution (normal saline)
- Remove needle and syringe, dispose of in sharps bin.
- Wipe site with gauze swab if necessary.
- Remove gloves, apron and wash hands with soap and water.

- Record the procedure in the patients notes, documenting the amount of solution removed and solution introduced.
- Ask patient to drink a cup of water to assess tolerance.
- Dictate letter to the patients GP informing them of the consultation and band adjustment.

4.3 Patients Lacking Capacity

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.

- Any act done for, or any decision made on behalf of a patient who lacks capacity, must be done, or made, in the persons best interest.

- Further information can be found in the MCA policy (PAT/PA19), and the Code of Practice, both available on the intranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

5. TRAINING/ SUPPORT

The Clinical Nurse Specialist and Specialist Dietitian for Bariatric surgery will perform regular band adjustments both in the radiological and clinical setting. Practitioners will use pier assessment on an annual basis to demonstrate that skills are maintained.

- ACP's and Nurse Practitioners trained on the removal of fluid from the gastric band will complete the C CAST training package and undergo 3 yearly training updates there-after.

- Supervisor must be a competent practitioner (GMC, 2013).

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

What is being Monitored	Who will carry out the Monitoring	How often	How Reviewed/ Where Reported to
Adverse incidents	Bariatric MDT and	Weekly MDT and 3 monthly Governance meetings	At weekly MDT meetings, outcomes disseminated by Nurse specialist and Dietitian. Documented on MDT spreadsheet. Governance meeting outcomes documented in the meeting minutes. Reported on the Trust's DATIX incident reporting system.
International guidance reviewed	Bariatric Surgeons, Clinical Nurse Specialist and Specialist Dietitian	3 monthly	At 3 monthly Bariatric governance meetings, outcomes disseminated by Nurse specialist and Dietitian. Documented in the meeting minutes.

7. DEFINITIONS

Bariatric - A branch of medicine that deals with the control and treatment of obesity and allied diseases.

SAGB - Swedish Adjustable Gastric Band.

Obesity - The condition of being obese; increased body weight caused by excessive accumulation of fat.

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 2)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

PAT/IC 5 - Hand Hygiene

PAT/IC 8 – Sharps Policy – Safe Use and Disposal

PAT/IC 14 – Management of Sharps Injuries and Blood and Body Fluid Exposure Incidents

PAT/IC 18 - Spillages of Blood and Other Body Fluids

PAT /IC 19 - Standard Infection Prevention and Control Precautions Policy

PAT/PA 2 – Consent to Examination or Treatment Policy

PAT/PA 19 - Mental Capacity Act 2005 - Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)

PAT/PA 28 - Privacy and Dignity Policy

CORP/EMP 4 – Fair Treatment for All Policy

CORP/EMP 27 – Equality Analysis Policy

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website:
https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

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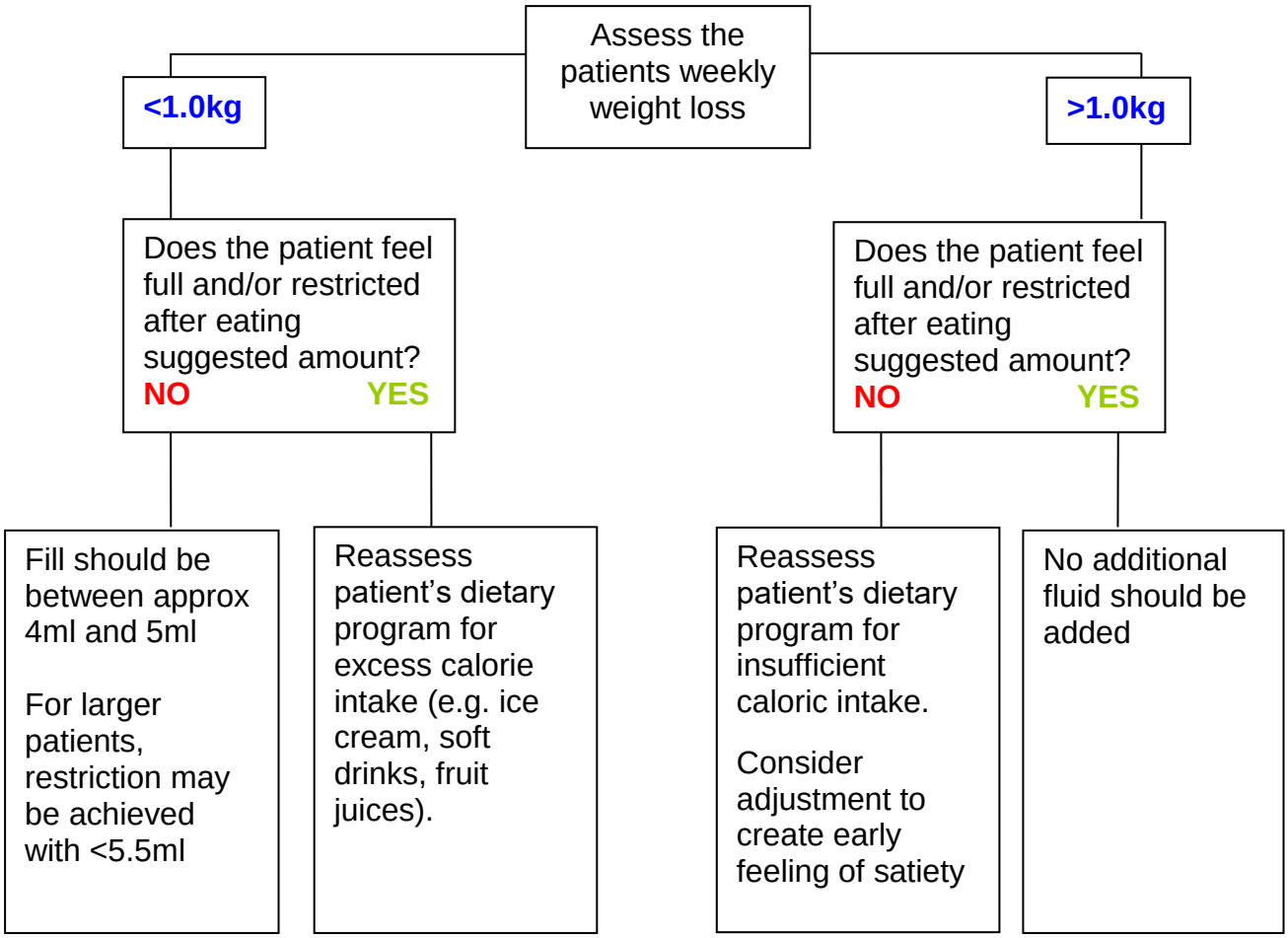
APPENDIX 1 – ADJUSTMENT GUIDELINES

Adjustment Guidelines

Adjustment guide to be used with the Ethicon SAGB VC or the Apollo Lap-Band AP. Alternative adjustable gastric bands may vary in balloon capacity.

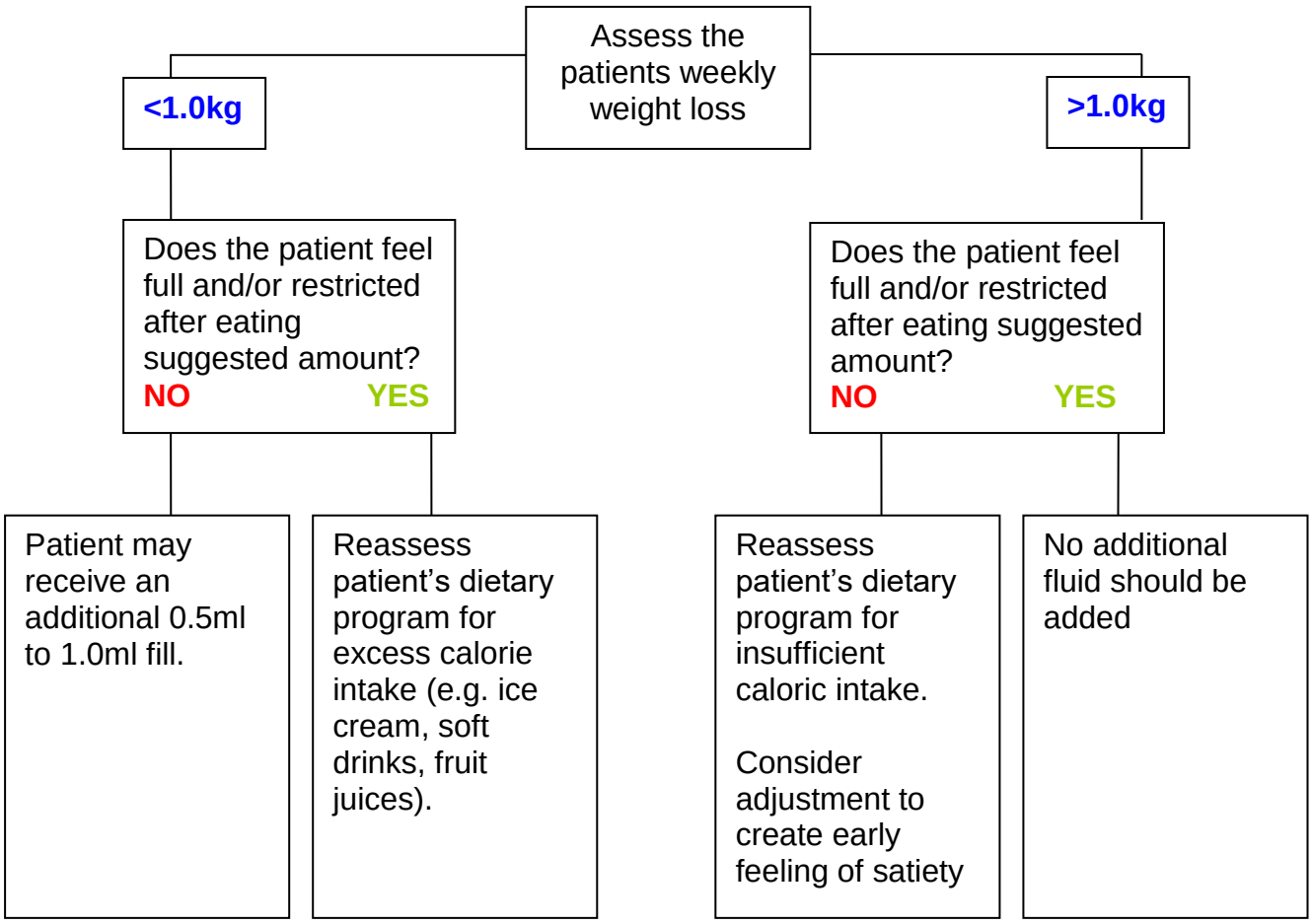
Total balloon capacity for the Ethicon SAGB VC: 11ml
Total balloon capacity for the Apollo Lap-Band AP standard system: 10ml
Total balloon capacity for the Apollo Lap-Band AP large system: 14ml

Initial band adjustment (6 weeks post-op)



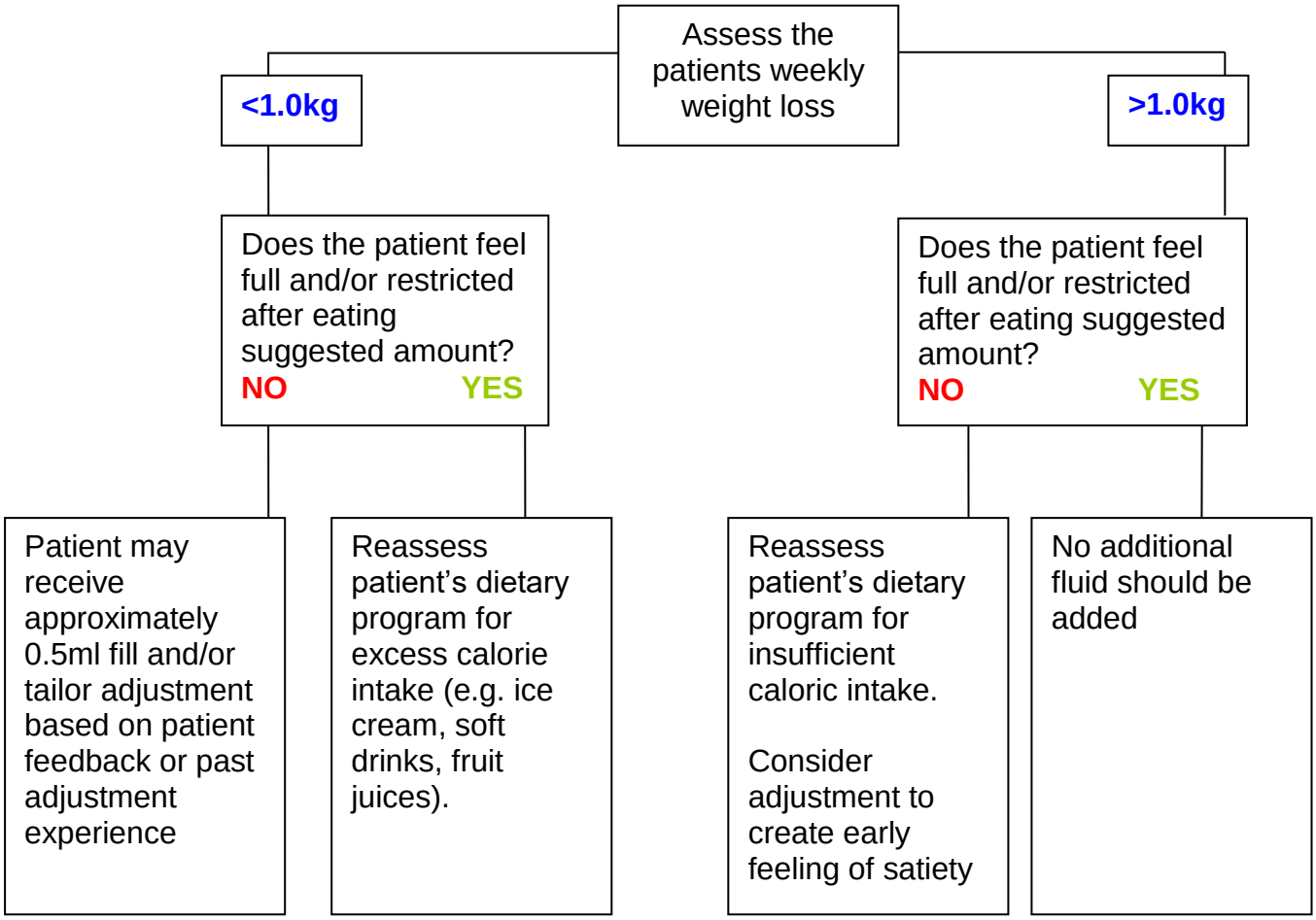
Apollo (2016) and Ethicon endo-surgery (2007)

Second band adjustment (10-12 weeks post-op)



Apollo (2016) and Ethicon endo-surgery (2007)

Band Maintenance:



Apollo (2016) and Ethicon endo-surgery (2007)

APPENDIX 2 - EQUALITY IMPACT ASSESSMENT PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Adjustable Gastric Band Management – Practice Guidelines	Surgery	Katie Kirk	Existing policy	November 2022

1) Who is responsible for this policy? Bariatric Surgery

2) Describe the purpose of the service / function / policy / project/ strategy? Practice guidelines to ensure best practice and patient safety

3) Are there any associated objectives? No

4) What factors contribute or detract from achieving intended outcomes? – Appropriate training of practitioners and appropriate equipment

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

- **If yes, please describe current or planned activities to address the impact**

6) Is there any scope for new measures which would promote equality? No

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4

If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* **Detailed Equality Analysis form in Appendix 4

Date for next review: November 2025

Checked by: S Balchandra **Date: September 2022**