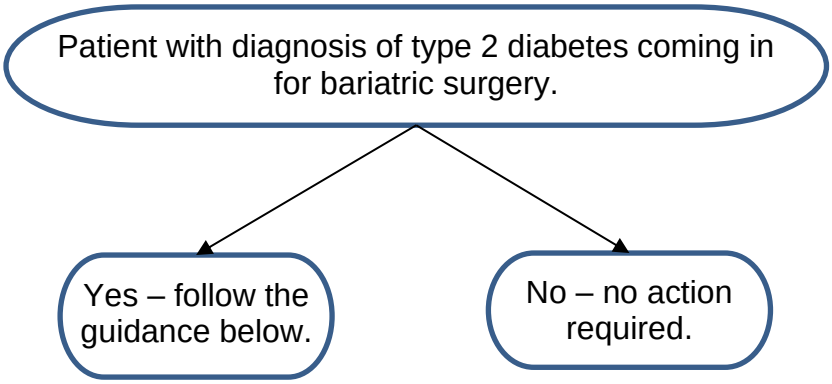
Royal Cornwall Hospitals
NHS Trust

Pre and Post Bariatric Surgery in Adults with Type 2 Diabetes, Clinical Guideline

V5.0

July 2024

Summary


Patient with diagnosis of type 2 diabetes coming in for bariatric surgery.
Yes – follow the guidance below.
No – no action required.

1. Aim/Purpose of this Guideline

1.1. This guidance is for use by the Bariatric Nurses, Upper GI Nurses, Diabetes Specialist Nursing Team and all staff caring for bariatric surgery patients pre and post operatively.

1.2. The aim of the guidance is to ensure the safe management of diabetes medications pre and post-surgery this document outlines a generic management algorithm for use with adult patients with Type 2 Diabetes Mellitus.

1.3. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

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2. The Guidance

2.1. In order to ensure the safe management of diabetes medications pre and post bariatric surgery this document outlines a generic management algorithm for use with adult patients with Type 2 Diabetes Mellitus.

2.2. It will remain the responsibility of the Bariatric Specialist Nurse (BSN) to co-ordinate communication with the Community and In Patient Diabetes Nurse team regarding planned admission dates for patients undergoing surgery and of their planned discharge dates etc.

2.3. **Only patients taking Insulin will be referred to Community diabetes team preoperative.**

2.4. **Pathway for the management of diabetes during the liver reducing diet phase of the pre-operative period:**

Please see next page.

Confirmed Diagnosis of Type 2 Diabetes

All patients with Type 1 Diabetes to be referred to the Community and Inpatient Diabetes Specialist Nurse Teams.

Referred for surgery

- Bariatric Nurse Specialist to discuss medication management with patient.
- Bariatric Nurse Specialist to check availability of Home blood glucose monitoring equipment. If no blood glucose testing equipment available Bariatric Nurse Specialist to advise patient to seek advice from practice nurse.

Date for surgery given

- Liver reducing diet (LRD) information provided by Bariatric Surgery Service – to commence 2 weeks prior to surgery.

Hypoglycaemia management leaflet sent to patients with their admission letter – Bariatric Coordinator. Bariatric Nurse to refer all type two diabetic patients on insulin to the Community Diabetes Specialist Nurse for pre operation review of medication and the Inpatient Diabetes Team for inpatient review prior to discharge home if remains an inpatient for greater than 24 hours or if blood glucose readings >15 or <4 mmols/L.

All patients should monitor and record their blood glucose levels during the liver reduction diet. This should be done 4 times daily.

Diet Controlled

No change to management.

If symptomatic of hypoglycaemia follow hypoglycaemia management leaflet and return to Liver reduction diet as soon as possible.

Oral Hypoglycemic agents

Stop at the start of the diet;

- Sulphonylureas.
- SGLT 2 inhibitors.
- Prandial Glucose Regulators.

Stop 24 hours pre-operative:

- **Glitazone – Stop.**
- **DPP4 inhibitor (Gliptin) – Stop.**
- **Acarbose – Stop.**

Metformin – omit on day of surgery (not to be restarted for at least 48hrs post-surgery. U&Es to be check prior to restarting.

On admission follow hospital Diabetes Guidelines.

If symptomatic of hypoglycemia follow hypoglycemia management leaflet and return to Liver reduction diet as soon as possible.

Insulin – Reduction at start of Liver Reduction Diet

Once daily insulin reduce dose by half.

Basal Bolus – stop rapid acting insulin and reduce long acting by half.

BD Mix Insulin – reduce both doses by half. **Contact number for Community DSN to be provided for support**.

On admission follow hospital Diabetes Guidelines.

If symptomatic of hypoglycemia follow hypoglycemia management leaflet and return to Liver reduction diet as soon as possible.

GLP Analogues

Weekly or daily injections should be stopped at the start of liver reduction diet.

If symptomatic of hypoglycemia follow hypoglycemia management leaflet and return to Liver reduction diet as soon as possible.

2.5. **Pathway for the management of type 2 diabetes during the Post-Operative Period:**

2.5.1. These are the management of Adults with type 2 diabetes mellitus whose diabetes is managed with:

A – Diet alone.

B – Oral Hypoglyceamia (OHA's).

C – GLP Analogues.

D – Insulin.

2.5.2. Please refer to the relevant guideline for the patient's current diabetes treatment.

2.5.3. If the patient is receiving multiple treatments i.e. insulin and OHA's etc. guidance for each therapy needs to be followed.

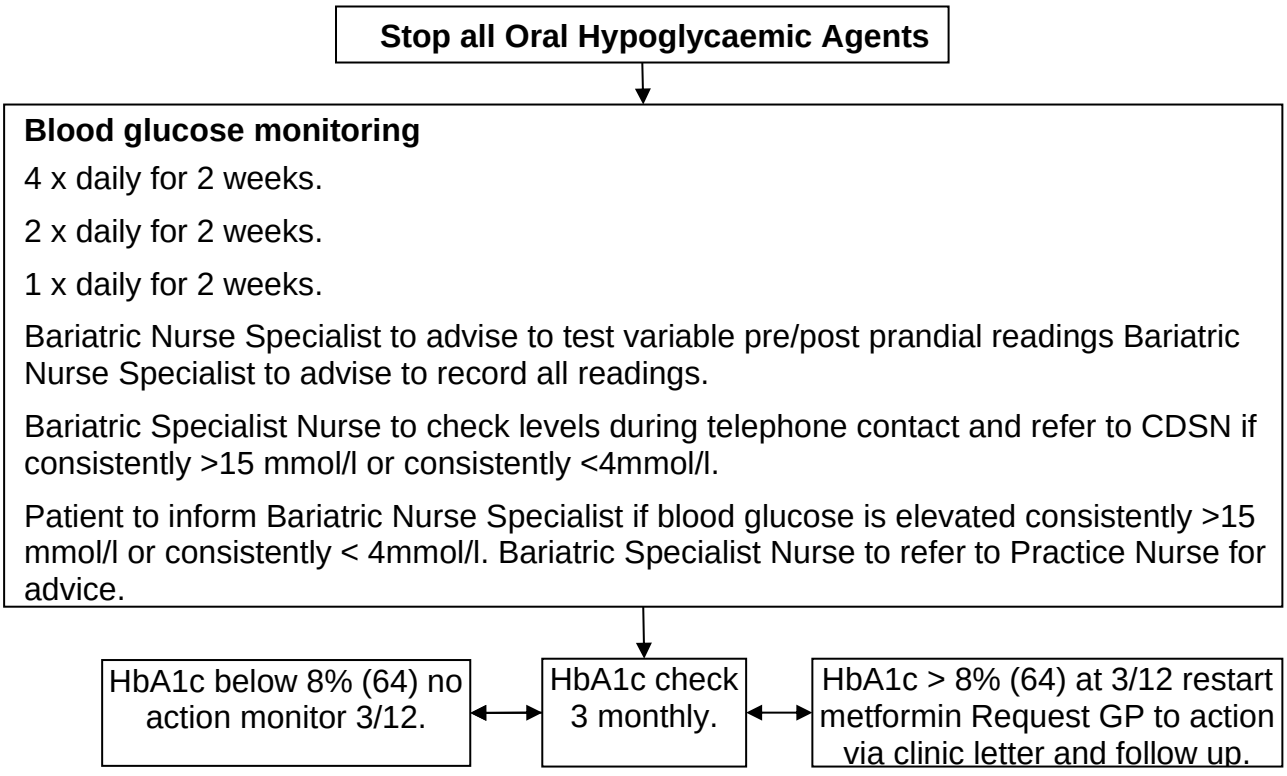
2.6. **A – Diet Controlled**

Type 2 diabetes mellitus management post bariatric surgery.

- Blood glucose testing not required.
- HbA1c to be checked 3 monthly – GP to review.
- Bariatric Nurse Specialist to advise the **patient** to refer to the hypoglycaemia management leaflet of signs symptoms and management of hypoglycaemia.

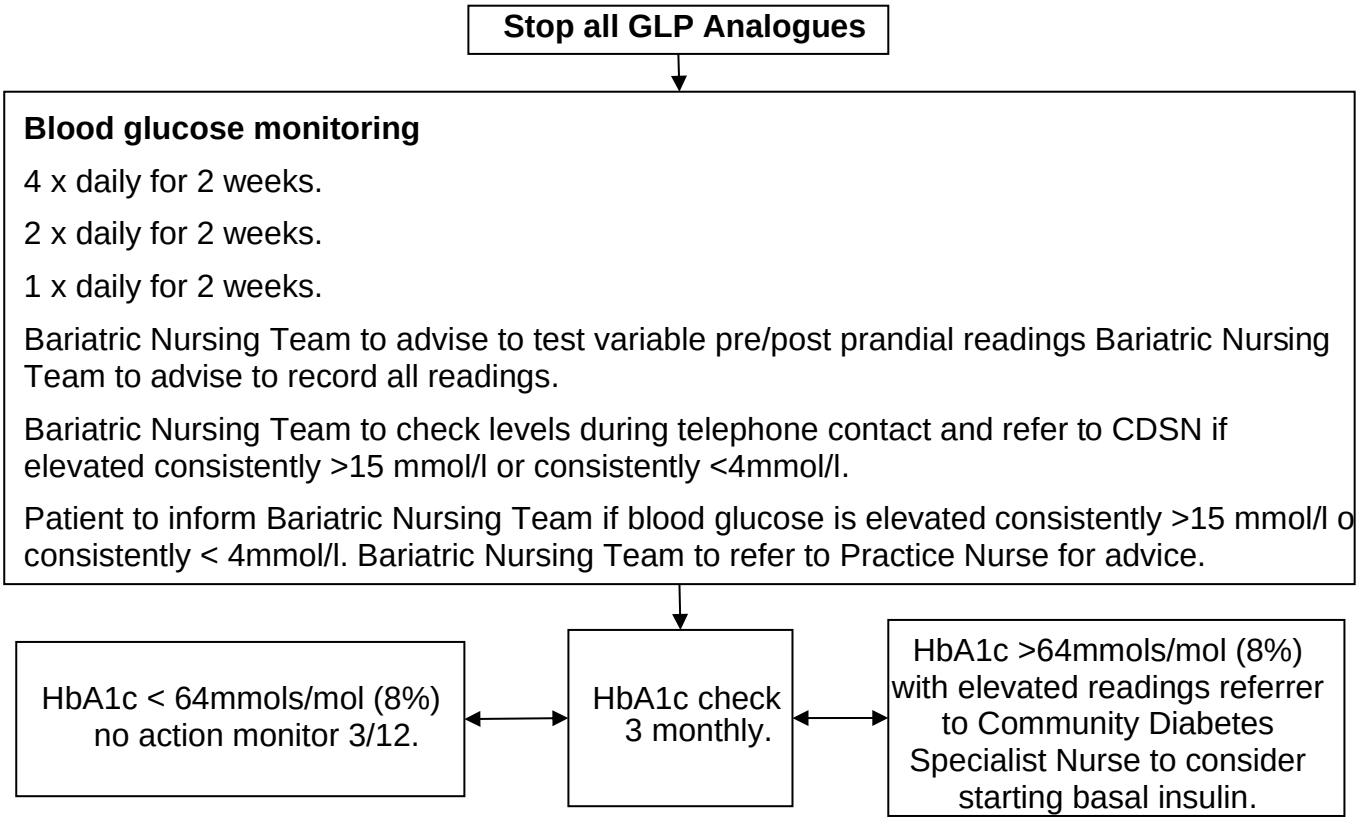
2.7. **B - Oral Hypoglycaemic Agents**

Type 2 diabetes mellitus management post bariatric surgery



2.8. **C – GLP Analogues (weekly or daily)**

Diabetes management post bariatric surgery.



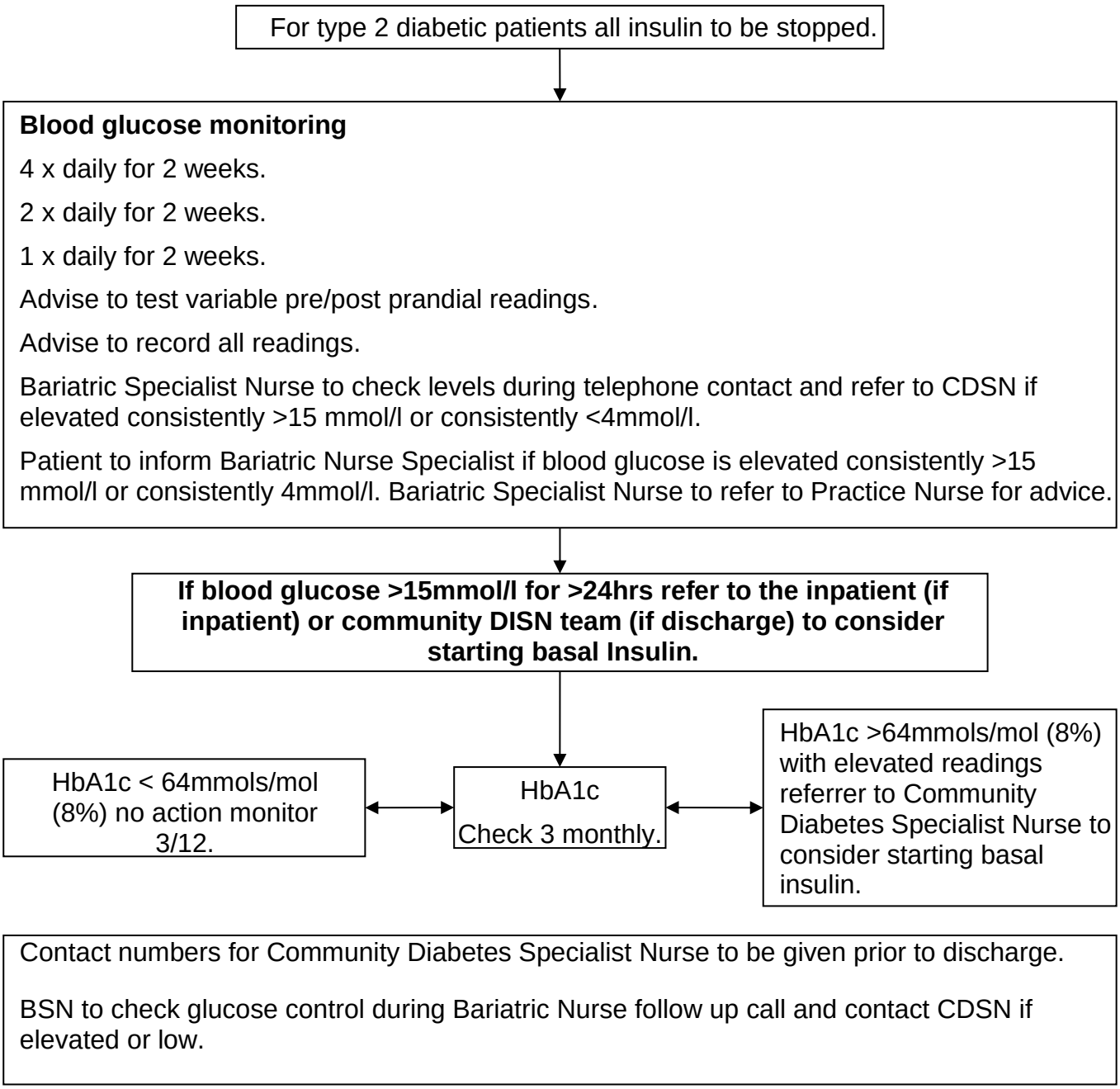
Patients on GLP Analogues will not need to be seen by Inpatient Diabetes Nurses unless clinically unstable.

Contact numbers for Community Diabetes Specialist Nurse to be given prior to discharge by Bariatric Specialist Nurse. Inform patients that they will not be contacted routinely but can call for advice.

2.9. **D- Insulin**

Type 2 diabetes management post bariatric surgery.

See next page.



Contact numbers for Community Diabetes Specialist Nurse to be given prior to discharge.

BSN to check glucose control during Bariatric Nurse follow up call and contact CDSN if elevated or low.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Compliance with the whole guideline will need to be monitored to ensure patients are cared for safely.
Lead	Jeremy Gilbert (Consultant Nurse – Obesity, Metabolic and Bariatric Surgery) in conjunction with the bariatric team and the diabetes team.
Tool	Bariatric Surgery Complication page on the Bariatric surgery database.
Frequency	Each element will be review depending on patient experience with the guidance. A report will be completed with every adverse event that happens. All adverse events will be discussed with the diabetic nurses.
Reporting arrangements	Consultant Nurse – Obesity, Metabolic and Bariatric Surgery and Diabetes Specialist Nurses will review all reports and discuss with Endocrinology Consultants. All adverse incidents will require discussion and an action plan and appropriate amendment to the guidance to be documented (change of guidance and minutes of meetings.
Acting on recommendations and Lead(s)	The Endocrinology Consultants in conjunction with the Diabetes Specialist Nurses and Consultant Nurse – Obesity, Metabolic and Bariatric Surgery Nurse Specialist will undertake subsequent recommendations and action planning for any or all deficiencies and recommendations within a reasonable timeframe. Required actions will be identified and completed in a specified timeframe.
Change in practice and lessons to be shared	Required changes to practice will be identified and auctioned within 1 week. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the Equality Diversity And Inclusion Policy or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Pre and Post Bariatric Surgery in Adults with Type 2 Diabetes, Clinical Guideline V5.0
This document replaces (exact title of previous version):	Pre and Post Bariatric Surgery in Adults with Type 2 Diabetes, Clinical Guideline V4.0
Date Issued/Approved:	June 2024
Date Valid From:	July 2024
Date Valid To:	July 2024
Directorate/Department responsible (author/owner):	Jeremy Gilbert – Consultant Nurse – Obesity, Metabolic and Bariatric Surgery
Contact details:	07789 615828 or 01872 252133
Brief summary of contents:	Guidelines for management of type 2 diabetic patients pre and post bariatric surgery.
Suggested Keywords:	Type 2 diabetes, Bariatric Surgery.
Target Audience:	**RCHT:** Yes **CFT:** No **CIOS ICB:** No
Executive Director responsible for Policy:	Director of Nursing, Midwifery and Allied Health Professionals.
Approval route for consultation and ratification:	Endocrinology Consultant, Lead Diabetes Nurse, Consultant Nurse – Obesity, Metabolic and Bariatric Surgery
Manager confirming approval processes:	Ian McGowan.
Name of Governance Lead confirming consultation and ratification:	Suzanne Atkinson.
Links to key external standards:	None required.
Related Documents:	None required.
Training Need Identified?	No.

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet.
Document Library Folder/Sub Folder:	Clinical/General Surgery.

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
05 May 2011	V1.0	Initial issue	Jeremy Gilbert Bariatric Nurse Specialist
29 April 2014	V2.0	Alteration of some of the clinical guidance.	Jeremy Gilbert Bariatric Nurse Specialist
14 September 2017	V3.0	No changes	Jeremy Gilbert Bariatric Nurse Specialist
19 November 2020	V4.0	No changes to content – updated to latest Trust template	Jeremy Gilbert Bariatric Nurse Specialist
25 June 2024	V5.0	No changes to content – updated to latest Trust Template.	Jeremy Gilbert Consultant Nurse – Obesity, Metabolic and Bariatric Surgery

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy/policy/proposal/service function to be assessed:	Pre and Post Bariatric Surgery in Adults with Type 2 Diabetes, Clinical Guideline V5.0
Directorate and service area:	Bariatric Surgery/ General Surgery and Cancer Services.
Is this a new or existing Policy?	Existing.
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Jeremy Gilbert, Consultant Nurse – Obesity, Metabolic and Bariatric Surgery.
Contact details:	07789 615828 / 01872 252133

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	All type patients with type 2 diabetes being admitted for bariatric surgery.
2. Policy Objectives	Clinical guidance to use with patients coming in for bariatric surgery to aid decision making in the pre and post-operative periods.
3. Policy Intended Outcomes	Effective management of type 2 diabetes pre and post bariatric surgery.
4. How will you measure each outcome?	Complication data as a result of the guidance in the policy.
5. Who is intended to benefit from the policy?	All patients with Type 2 diabetes and post bariatric surgery. Nursing staff involved in the care of type 2 diabetes patients coming in for bariatric surgery.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/visitors: No • Local groups/system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/groups:** Dr Steven Creely (Endocrinologist). Amanda Veall (Lead Diabetes Nurse). Jeremy Gilbert (Consultant Nurse – Obesity, Metabolic and Bariatric Surgery).
6c. What was the outcome of the consultation?	No changes required to the guidance – approved.
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:** No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	Bariatric Surgery is only offered to patients aged 18yrs and over. This guidance does not include Children.
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	

Protected Characteristic	(Yes or No)	Rationale
Religion or belief	No	
Marriage and civil partnership	No	
Pregnancy and maternity	No	Bariatric Surgery would not be offered to a patient during pregnancy.
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment:

Jeremy Gilbert Consultant Nurse – Obesity, Metabolic and Bariatric Surgery.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis