

## PERI-OPERATIVE DIABETES MANAGEMENT PLAN

### Surgery/procedure

Planned procedure ..... Parent unit .....

Elective admit/PAC  Ward  .....

Estimated date of procedure .....  AM  PM - Light Breakfast

### Diabetes summary

Diabetes type  Type 1  Type 2  Other .....

### Medications (list)

Orals & GLP1 (subcut) .....

.....

Insulin  Basal .....

Rapid .....

Premixed .....

### PLAN (See tables overleaf for management guide)

**Day before procedure**  Nil changes to diabetes medications **OR**  
 Other, please specify: .....

**Day of procedure**

1. WITHHOLD oral and/or GLP1 diabetes medications  
 (Please list, see **Table 1**)  
 .....

2. INSULIN PLAN  
 (Please write doses and timing, see **Table 2**)  
 .....

3. INTENSIVE BLOOD GLUCOSE (BG) monitoring every 2 hrs

4. IV 5% Dextrose 100ml/hr if BG < ..... mmol/L  
 (Applies only if patients received insulin, see **Table 3**)

**Post procedure/recovery**  Return to usual regimen once eating and drinking  
 Prolonged fast anticipated  
 (Consider referring RMH Inpatient Diabetes Service, see **Table 4**)

**Recommend:** for all insulin pump patients and unstable diabetes refer to RMH Inpatient Diabetes Service

### NURSE CHECK

**PAC**  
 Written instructions given to patient: Yes   
 Please initial and date .....

**DOSA or WARD**  
**Plan followed:**  
 Yes   
 No  (recommend discuss with HMO/ Anaesthetist)

**Nurse**  
 Please initial and date .....

Comments .....

**RECOVERY/ POST OP**  
**Plan followed:**  
 Yes   
 No  (recommend discuss with HMO/ Anaesthetist)

**Nurse**  
 Please initial and date .....

Doctor.....Signature.....Contact No.....Date.....

*All Drug and IV Fluid orders must be written on inpatient medication and IV fluid charts to enable plan to be executed on surgery day  
 Please ensure written instructions are given to the patient prior to surgery  
 If plan not able to be completed by Anaesthetist, please ensure it is delegated to parent unit HMO*

Generic name	Trade name	Recommend	
<b>Biguanides</b> Metformin*	Diabex (XR), Metex Diaformin, Glucophage Glucovance	Withhold on day of procedure	
<b>Sulphonylureas</b> Gliclazide Gliclazide MR** Glibenclamide** Glimepiride** Glipizide	Diamicon, Glyade Diamicon MR Daonil Amaryl, Dimirel Minidiab		
<b>Glitazones</b> Pioglitazone Rosiglitazone	Actos Avandia		
<b>α1Gluc inhibitors</b> Acarbose	Glucobay		
<b>Glitinides</b> Repaglinide	Novonorm		
<b>DDP4 inhibitors</b> Sitagliptin Vildagliptin Linagliptin Saxagliptin	Januvia, Janumet Galvus, Galvumet Trajenta, Trajentamet Onglyza, Kombiglyze		
<b>GLP1 analogues</b> Exenatide Liraglutide	Byetta, Bydureon Victoza, Saxenda		
<b>SGLT2 inhibitors</b> Dapagliflozin Empagliflozin Canagliflozin	Forxiga, Xigduo Jardiance, Jardiamet Invokana		
* may be appropriate to withhold on evening prior for major surgery or large radiocontrast loads			
** may be appropriate to withhold on evening prior			

Generic name	Trade name	Recommend	
		AM (no breakfast)	PM (light breakfast)
<b>Long basal</b> Insulin glargine Insulin detemir Insulin degludec	Lantus, Toujeo Levemir	<b>nocte basal only*</b> Usual dose night before	Usual dose night before
		<b>mane basal only</b> Usual mane dose	Usual mane dose
		<b>bd basal</b> Usual nocte & half mane dose	Usual nocte & half mane dose
<b>Rapid</b> Insulin aspart Insulin lispro Insulin glulisine Insulin regular Insulin neutral	Novorapid Humalog Apidra Actrapid Humulin R	Withhold day of surgery	Half mane dose
		<b>Pre-mixed</b> aspart/protamine lispro/protamine	Novomix 30 Humalog Mix 25 Humalog Mix 50
regular/isophane	Mixtard 30/70 Mixtard 50/50		
<b>Intermediate Basal</b> isophane insulin	Protaphane Humulin NPH	Half mane dose	Half mane dose
* nocte basal insulin dose can be decreased by 10-20% if concern of hypoglycaemia on the morning of procedure			

<b>Withhold Non insulin meds</b>	Refer to Table 1, withhold all oral +/- injectable GLP1 medications on morning of procedure day
<b>Insulin</b>	Refer to Table 2 for recommendations to modify insulin therapy  BG <4 For hypoglycaemia withhold insulin and consult doctor, consider referring to Inpatient Diabetes Service BG ≥4 Administer basal insulin subcut according to periop diabetes management plan BG ≥15 Administer 4 units Novorapid or Actrapid insulin subcut if BG ≥15, check ketones (Consider referring to RMH Inpatient Diabetes Service for advice if need to defer surgery)  <ul style="list-style-type: none"> <li>Patients on insulin always need insulin, even when fasting</li> <li>Insulin requiring patients should be prioritised for early morning procedures</li> <li>Type 1 diabetes patients on insulin pumps should be referred to RMH Inpatient Diabetes Service (Endocrinology)</li> </ul>
<b>Intensive Monitoring</b>	BG 2 hourly whilst fasting ( <b>safe BG range 6-10mmol/l</b> )
<b>IV Fluids†</b>	<b>Only required if patient has received subcutaneous insulin</b>  <ul style="list-style-type: none"> <li>Commence from first missed meal (e.g. 07:00hrs) to minimise risk of hypoglycaemia.</li> </ul> BG < 6 5% Dextrose 100ml/hr recommended to avoid hypoglycaemia BG 6-10 5% Dextrose 100ml/hr optional, can be considered (to minimise hypoglycaemia) BG >10 5% Dextrose not necessary given low risk hypoglycaemia  <ul style="list-style-type: none"> <li>IV fluid type should be tailored by treating doctor according to the clinical scenario.</li> <li>†There are clinical circumstances where 5% Dextrose may be contraindicated in some patients, such as those with end stage renal failure, cardiac failure and intracranial pathology</li> </ul>

	RECOVERY WARD	TRANSFER HOME WARD	
		No fast	Prolonged fast
<b>Intensive monitoring BG</b>	Hourly BG	tds pre-meals & pre-bed	4 hourly
<b>IV Fluids†</b>	If nil by mouth and insulin administered 5% Dextrose preferred to minimise hypoglycaemia risk	Nil need for 5% Dextrose	5% Dextrose preferred if insulin given to minimise hypoglycaemia risk
<b>Insulin</b>	Notify parent unit HMO if BG ≥15 as need to consider stat dose of insulin	Resume usual insulin regimen	Consider basal insulin + short-acting insulin 4 hrly or intravenous insulin infusion (Refer to RMH Inpatient Diabetes Service)
<b>Non-insulin medications</b>	Resume once eating & drinking	Resume usual medications	Withhold