INSULIN PRESCRIPTION & ADMINISTRATION RECORD (IPAR)

NAME:

DATE:

DoB CHI:

Location: **Hospital:**

Type 1 ☐ **Type 2** ☐

Prescribing subcutaneous insulin

DO NOT USE abbreviations 'U' or 'IU' when prescribing insulin.

If the usual insulin regime is unknown substitute regime until insulin details are established e.g.

- Prescribe once daily or twice daily isophane in the elderly
- Use short-acting/intermediate mixture twice daily in others
- Calculate dose as 0.3 units/kg/24hrs for those at risk of hypoglycaemia, 0.5 units/kg/24hrs if insulin resistant

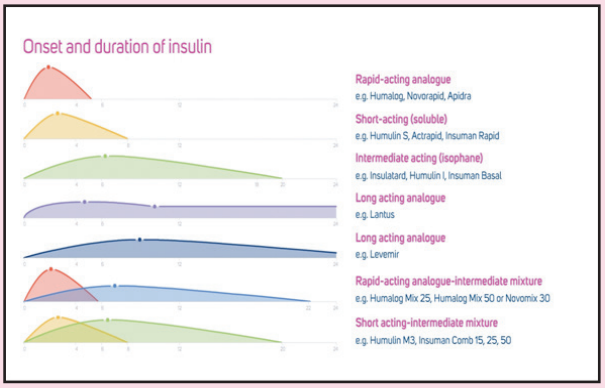
Review monitoring results daily and adjust insulin if required to avoid hypoglycaemia and hyperglycaemia

Only prescribe intravenous insulin in acutely unwell or fasting patients or those who are unable to tolerate oral intake

Safety needles **MUST** be used by staff if administering insulin

Insulin pen devices are designed for single patient use only

DO NOT extract insulin from pen devices using a syringe



BG Targets: _____ mmol/L

Subcutaneous Insulin Prescription Insulin device detail .....

Start Date	Name of Insulin Preparation [in CAPITALS]	Dose in Units	Time of Administration e.g. before breakfast e.g. at 2200 hours	Prescribed by	Discontinued By Sign, date & draw a line through prescription
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		units			
		Self-managed by Continuous Subcutaneous Insulin Infusion (CSII)			

ONCE ONLY 'STAT' INSULIN DOSE PRESCRIPTION

Caution: use with care - STAT doses of rapid acting insulin can precipitate hypoglycaemia

Date	Name of Insulin Preparation	Dose in Units	Time e.g. 0900 hours	Prescribed by	Administered by	Time Given	Reason for STAT Dose

If more than 2 stat doses required consider adjusting normal regime or discussing with medical team.
CAUTION: 1 unit of quick acting insulin lowers BG by 2-3mmol

Guideline for Monitoring and Managing Glycaemic Control for Inpatients with Diabetes

Aim for blood glucose (BG) levels of 4 -10mmol/L in the inpatient setting. Note: this may not be suitable in frail or elderly patients due to the risk of hypoglycaemia
Check ketones at diagnosis of diabetes, if BG is greater than 15mmol/L and in patients who are acutely unwell.
Check ketones in pregnant women who are acutely unwell irrespective of BG level. Ketone level above 0.6 mmol/L is abnormal. Urgent action required if ≥1.5mmol/L.

Management of Hyperglycaemia

SITUATION

Blood glucose (BG) levels >10mmol/L increase the risk of osmotic symptoms of diabetes, dehydration and can delay healing. Hyperglycaemia can lead to Diabetic Ketoacidosis (DKA) or Hyperosmolar Hyperglycaemia Syndrome (HHS).

BACKGROUND

THINK of causes of high blood glucose levels, such as:

- Infection and/or stress response to illness
- Steroid therapy
- Nutrition e.g. supplements, NG Feeding or dietary indiscretion
- Insulin and/or diabetes medication omission/inadequate dose
- Insulin or drug administration at an inappropriate time
- Insulin absorption problem e.g. technique/administration/injection site
- Pancreatic insufficiency/acute pancreatitis

ASSESSMENT

CHECK for potential cause of elevated BG levels i.e.

- Assess pattern of BG levels over the previous 48 hrs
- Check for signs of infection
- Check insulin/medication prescription, dose, time of administration, food intake, activity
- Check for factors which may affect insulin absorption
- Check credibility of BG monitoring e.g. hand washing prior to testing
- Check ability to self-manage medication
- Check insulin delivery device
- Check for ketones during acute illness or vomiting if BG>15mmol/L. In pregnancy do this irrespective of BG level if the patient is acutely unwell
- Ensure that patients using Continuous Subcutaneous Insulin Infusion (CSII) checkpump function, pump programming, infusion set and its site.

RECOMMENDATION

ACT to address the cause(s) of hyperglycaemia

- If the trend of pre-meal BG levels is >10mmol/L, review medication and clinical status
- **If ketone level is >1.5mmol/L refer for urgent medical review and increase insulin and fluid intake**
- Review and check BG and ketones 2 - 4 hourly until <0.6mmol/L
- Consider adjustment of insulin /medication if steroid therapy is prescribed
- Increase frequency of BG monitoring following treatment change
- Adjust insulin/medication further on an ongoing basis as required
- Inform and agree all medication changes with patient/parent/carer
- Provide appropriate patient and staff education as required
- Refer to the Diabetes Team for advice as required

Management of Hypoglycaemia

SITUATION

Blood glucose (BG) level <4mmol/L is a potentially dangerous side effect of insulin therapy and hypoglycaemic agents e.g. gliclazide, glipizide, glimepiride, glibenclamide. Hypoglycaemia must be avoided. However prompt treatment is required if it occurs - see recommendation below.

BACKGROUND

THINK of the causes of low blood glucose levels, such as:

- Inadequate carbohydrate food intake
- Too much insulin and/or oral hypoglycaemic medication
- Reduction or withdrawal of steroid therapy
- Insulin absorption problem e.g. technique/administration/injection site
- Increased activity
- Renal or hepatic impairment or pancreatic insufficiency

ASSESSMENT

CHECK to identify the reason for hypoglycaemia:

- Assess pattern of BG levels e.g. over previous 48 hours
- Assess recent nutritional intake
- Identify the drugs prescribed that may precipitate hypoglycaemia
- Check insulin/medication prescription, dose, time of administration, food intake, activity
- Check for factors which may affect insulin absorption
- Check ability to self-manage medication if appropriate
- Establish cause of hypoglycaemia and review medication
- Increase frequency of BG monitoring following treatment charge

RECOMMENDATION

ACT immediately to treat hypoglycaemia with 15 - 20 grams of quick acting carbohydrate

- If patient is able to swallow – administer 60 mL of Glucojuice or 90-120 mL Lucozade
- If patient is confused or drowsy but able to swallow: administer 1-2 tubes of glucose gel
- If patient is unconscious/unable to swallow: administer IV Glucose 10% 150ml or 20% 75ml or 1mg IM Glucagon (adults)
- Note: Glucagon is not suitable in malnourished patients, in those with severe liver disease, or those treated with oral hypoglycaemic agents
- Provide complex carbohydrate snack promptly e.g. wholemeal bread/toast
- Observe and chaperone patient until recovery is complete
- **Recheck BG in 15 minutes and repeat treatment if necessary**
- Do not omit insulin: treat the 'hypo' and administer the usual insulin as prescribed
- Take appropriate action to prevent further hypoglycaemia
- Inform and agree any medication changes with patient/parent/carer
- Provide appropriate patient and staff education as required
- Refer to the Diabetes Team for advice as required

Insulin Administration, Blood Glucose and Ketone Monitoring Record

See guidelines for hyperglycaemia and hypoglycaemia on previous page.
(BG = Blood Glucose)

Patient's Name:

CHI Number:

Type 1 ☐ Type 2 ☐

DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												
DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
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Hypoglycaemia treatment BG rechecked by												
DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												
DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												

Patient's Name: Type 1 ☐ Type 2 ☐

CHI Number:

KEY PERFORMANCE INDICATORS: Improvement is required if any of the questions below are answered NO.

Insulin Precribing:

1. Is insulin preparation prescribed using capital letters? Yes/No
2. Is insulin prescribed in the main prescription document? Yes/No
3. Is insulin prescribed WITHOUT ABBREVIATION 'u' or 'iu'? Yes/No
4. Has insulin been administered at each time prescribed? Yes/No

Hypoglycaemia Management (in the event of BG <4mmol/L):

1. Is treatment for hypoglycaemia available in the ward? Yes/No
2. Was the appropriate treatment given to patient? Yes/No
3. Was blood glucose rechecked in 15 minutes? Yes/No
4. Has diabetes management and medication been reviewed? Yes/No

DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												

DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												

DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												

DATE	Breakfast			Lunch			Evening Meal			Suppertime		
Time												
Ketone urine/blood												
BG mmol/L												
BG <4mmol/L												
Insulin Name & Dose			units			units			units			units
Insulin Name & Dose			units			units			units			units
Given by												
Hypoglycaemia treatment BG rechecked by												