Continuous Glucose Monitoring with 780G Insulin Pump

A continuous glucose monitor (CGM) is a device that measures interstitial glucose levels every 5 minutes and sends these readings to an insulin pump. As it is measuring interstitial glucose it can lag behind blood glucose levels. CGM does not take away the need for blood glucose testing but can be used to provide extra information about blood glucose trends.

The CGM is set with limits of acceptable glucose levels and will alert via the insulin pump if these limits are reached. These will be documented on the care plan clearly for staff reference.

Continuous Glucose Monitoring (CGM)

ALERT	REASON	STEPS TO TAKE
Alert before low	If <u>Suspend before low is on</u> , you will be alerted when the insulin is suspended. If <u>Suspend before low is off</u> , you will be alerted when the sensor predicts you will reach your low limit in 30 minutes	Do not treat your glucose based on the Sensor Glucose. Confirm using your blood glucose meter. Treat if necessary based on the hypo flowchart advice and continue to monitor.
Alert on Low	Sensor glucose values are equal to or lower than your low limit.	
Alert before high	Sensor glucose reading is expected to reach the high glucose limit in the length of time that you set for the Time before high (5-30 minutes)	Do not treat your glucose based on the Sensor Glucose. Confirm using your blood glucose meter. Treat if necessary based on the hyper flowchart advice and continue to monitor.
Alert on high	Sensor glucose values are equal to or higher than the high limit you set.	

- To acknowledge alerts/alarms follow on screen instructions.
- Do not calibrate sensor unless instructed to do so by parent.
- Blood glucose test required prior to bolus (snack, lunch and corrections).

Signature of parent/carer	Date



Pupil's name Date of Birth

SmartGuard suspend features	Impact on insulin delivery if suspend feature is turned on	Information displayed by the pump	
Suspend before low	Insulin delivery is temporarily stopped if sensor glucose value is approaching your low limit	You will receive this alert message and need to check your BG. Insulin delivery will remain suspended after the alert is cleared. Suspend before low 00:44 Delivery stopped. Sensor glucose approaching Low Limit. Check BG. Of the alert is not cleared in 10 minutes, the pump will begin to siren.	 After the alert or alarm message is cleared and insulin delivery has stopped, the home screen will display: Suspended before low or Suspended on low at the bottom of the screen A shaded are to represent the time when the insulin has been suspended A flashing SmartGuard technology icon.
Suspend on low	Insulin delivery is temporarily stopped if sensor glucose value has reached or fallen below your low limit.	You will receive this alarm message and need to check you BG. Insulin will remain suspended after the alarm is cleared. Suspend on low 22:44 Delivery stopped. Sensor glucose 60 mg/dL. Check BG. If the alarm is not cleared after 10 minutes, the pump will begin to siren and an emergency message will appear on the pump screen.	7 8 20 3.3 mmovL 14 mmovL 18 0.4 U 5 Act. Insulin Suspended before low

Signature of parent/carer Date



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Individual Patient Settings:

These are subject to change by the parent/carer and it is their responsibility to update the care plan when changes are made.

Low Limit:

High Limit:

What the Sensor Icons Mean:

↑ or ↓	Sensor Glucose been rising or falling by 1 – 2 mmol/L over the last 20 minutes
↑↑ or ↓↓	Sensor Glucose been rising or falling by 2 – 3 mmol/L over the last 20 minutes
↑ ↑↑ or ↓ ↓↓	Sensor Glucose been rising or falling by 3 mmol/L over the last 20 minutes

Manual Mode:

If this function is switched on then the pump has the ability to:

- PREDICT when approaching low glucose levels 30 minutes in advance
- Automatically STOP insulin delivery before going hypo
- Automatically RESUME it when your glucose levels recover

Alert Message: If BG trending low or falls to low limit;

Suspend before low (Manual Mode use only)

Action:

- Allow pump to suspend and resume insulin delivery according to the BG levels.
- If bolus of insulin is required for food/correction and pump is suspended then the pump must be manually restarted before proceeding.
- Always do a manual Blood Glucose (BG) check before resuming insulin and at the snack and mealtimes in insulin pump care plan.
- If hypo does occur then follow hypo flowchart as per the insulin pump care plan
- if the pump is suspended, resume 'basal deliver' once hypoglycaemia is resolved (blood glucose greater than 4.0mmol/L). To do this press 'suspend before low' and the pump will guide you through resuming the basal insulin.
- Calibrating sensor always select 'no' when prompted.

Signature of parent/carer	Date

