Diabetes

1. Notification

The parent/carer of the pupil should be advised in school handbook and enrolment form of the need to notify the school that the pupil has Type 1 diabetes (diabetes). Pupils who have diabetes are at risk of variable blood glucose and will need treatment in school with insulin.

2. School Healthcare Plan

Form 9: School Healthcare Plan - Diabetes <u>'640G or 670G or 780G'</u> Insulin Pump and, if required, supplementary Continuous Glucose Monitoring for '640' pump plan, Medtronic published 670G/780G CGM supplementary

<u>OR</u>

Form 9: School Healthcare Plan – Diabetes insulin injection

<u>OR</u>

Form 9: School Healthcare Plan - Diabetes <u>'Omnipod'</u> Insulin Pump

<u>OR</u>

Form 9: School Healthcare Plan - Diabetes <u>'T: Slim X2'</u> Insulin Pump and, if required, supplementary Continuous Glucose Monitoring for 'T: Slim X2' pump plan

<u>OR</u>

Form 9: School Healthcare Plan – Diabetes DEXCOM

Should be completed for all pupils who have diabetes by the parent/carer and the school. Support in completing the school healthcare plan can be sought through the Diabetes Nurse Specialists. The plan should be reviewed every year.

3. Awareness/Continuing Professional Development - Requirements for all Schools

The head teacher should ensure that all teaching and support staff are aware of these procedures pertaining to a pupil's condition and the particulars of any needs that may arise in school. The head teacher is responsible for ensuring all school staff are aware of the arrangements to manage a medical emergency.

The head teacher should encourage staff to volunteer to undertake the administration of appropriate emergency treatments. The head teacher should enable these staff to attend the earliest available ASL: Diabetes – Managing Diabetes in Educational Establishments session available through the Continuing Professional Development Directory. For further details on CPD, see section 4.3.

The Specialist Diabetes Nurse will visit the schools of pupils newly diagnosed with diabetes and give advice and information to staff directly involved with that pupil.

4. The School Curriculum

Diabetes should not impede any area of the curriculum for pupils in school. Arrangements must be made to allow pupils with diabetes to carry out blood glucose testing, treat hypoglycemia (low blood glucose), administer insulin and eat additional carbohydrate if required. A pupil with diabetes must not be delayed from receiving a meal when insulin has been given.

Pupils with diabetes should not be prevented from attending residential excursions. The Diabetes Nurse Specialist should be contacted on 0131 312 0460 prior to residential excursions.

5. Review of School Healthcare Plans

School Healthcare Plans will be reviewed annually and if there are any changes in treatment. If there are no changes, the Agreement to School Healthcare Plan Review sheet should be completed and signed as indicated. If there are any significant changes a new school healthcare plan should be completed.

6. Checklist of General School Arrangements

The following summarises general school arrangements.

- All school staff, supply teachers, visiting teachers and support staff should be made aware of pupils with diabetes and of these procedures.

Diabetes – continued

- The class register should be clearly marked to indicate pupils with diabetes so that when a supply teacher takes a class, she/he is aware of any pupils with diabetes in that class.
- All staff who may have direct day-to-day responsibility for the pupil should be familiar with the School Healthcare Plan.
- Pupils should carry a supply of glucose. An emergency box of supplies should be kept in a central, easily accessible place.
- A list of staff who have attended an ASL: Managing Diabetes in an Educational Establishment within the last two years should be displayed clearly in the school office.
- The relevant parties as indicated on the form must sign the School Healthcare Plan
- The parent/carer has responsibility for the contents of the emergency box of supplies. As a matter of good practice, the school should check the expiry date of all medication and send home Form 6a/Notice to parent/carer that medication needs replenishing (Appendix 8) to indicate when the supplies are becoming low.
- Procedures for summoning emergency services (Appendix 20) should be clearly displayed by all telephones.
- Should a pupil require emergency treatment the instructions on the HYPOglycaemia or HYPERglycaemia (as appropriate) Care Flow Diagram must be followed.
- The Diabetes Nurse Specialists should be contacted if a pupil has frequent periods of absence with diabetes given as the reason for their absence.

Pupil's name	Photograph of pupil
Date of birth	
CHI	
Address	
School	

This plan should be completed by the pupil's parent/carer and, where it involves the administration of medication, it must be approved by the hospital consultant/specialist nurse/GP.

Name of approving clinician	
Signature	**Date**

(A letter detailing medication/care and signed by the hospital consultant/specialist nurse or GP can replace this signature)

Signature of parent/carer	**Date**

Once completed, the parent/carer is responsible for taking a copy of this School Healthcare Plan to all relevant hospital/GP appointments for updating.

Pupil's name	**Date of Birth**

Parent/Carer Contact 1 **Parent/Carer Contact 2**

Name	**Name**
Relationship to pupil	**Relationship to pupil**
Address	**Address**
☎ Home	**☎ Home**
☎ Work	**☎ Work**
☎ Mobile	**☎ Mobile**

Hospital/Clinic Contact **General Practitioner**

Name	**Name**
Address	**Address**
☎	☎

Signature of parent/carer	**Date**

Pupil's name	**Date of Birth**

What is Diabetes?

Diabetes (type 1) is a condition that develops when a person does not produce enough of the hormone insulin. Insulin allows the glucose from the food we have eaten, to move from the bloodstream into the cells, where it can be used for energy.

People who develop diabetes (type 1) in childhood require insulin by injection or insulin pump therapy. A healthy, balanced diet is recommended and carbohydrate counting of all food is required to ensure that the correct amount of insulin is given.

Carbohydrates are divided into 2 groups:

1. Sugary carbohydrates e.g. sweet biscuits, chocolate, fruit and some dairy products.
2. Starchy carbohydrates e.g. bread, cereals, pasta and rice.

What is an Insulin Pump?

An insulin pump is a way of giving insulin. Rather than injecting insulin up to 5 times a day the pump delivers a background (Basal) rate of insulin. The child/carer will then inform the pump of BG level (Dependent on glucose meter) and carbohydrate intake to allow a bolus dose of insulin to be delivered prior to food being eaten.

What is Continuous Glucose Monitoring (CGM)?

A continuous glucose monitor 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.

The CGM that will be used with OP5 may be Freestyle Libre 2 plus or Dexcom both have been licensed for 'no finger test' – therefore the sensor data at snack and lunch time can be used without a finger test, follow guidance below when finger test may be required.

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.

The Omnipod 5 Delivery System

Insulin delivery in Automated Insulin Delivery (AID) Systems in AID systems like Omnipod 5, insulin delivery is adjusted automatically based on sensor glucose values. With Omnipod 5, the system automatically increases and decreases or pauses insulin delivery every 5 minutes based on where glucose is now, and where it is predicted to be in 60 minutes.

Details of Medication/Equipment (Delete as appropriate)

Medication/Equipment	Dose	Comments
Glucose tablets	3 tablets	As per **HYPO**glycaemia action flowchart
Lift Glucose Shot (glucose juice)	60 mls	As per **HYPO**glycaemia action flowchart
Glucogel	1 tube	As per **HYPO**glycaemia action flowchart
Other (please specify) _____		As per **HYPO**glycaemia action flowchart
Blood glucose and ketone meter	N/A	For checking blood glucose levels
Insulin (state insulin type) ----------	Variable and some children may further adjust dose for activity.	Dose depends on blood glucose level and amount of carbohydrate to be eaten.

Signature of parent/carer	**Date**

Pupil's name	**Date of Birth**

What the school needs to know:

1. How to use the insulin pump (IMPORTANT: Member of school staff who will be administering the insulin via the pump and those who are supervising the child doing their own administration)
2. How to manage and treat 'hypos'
3. How to manage and treat hyperglycaemia and how to check for ketones.
4. Where supplies are kept (Hypo Kit, Spare Sets and Insulin Pens)
5. When and where to get help (detailed in Health Care Plan)

Details of Care:

_____has Type 1 Diabetes and has an Omnipod 5 device which administers insulin on a continuous basis. Their medical care is managed by the RHSC Paediatric Diabetes Team and parents/carers are fully trained to manage and make decisions about their child's care.

Because of _____ age he/she cannot take full responsibility for managing her/his diabetes. These are the things that they need help from school staff with: (Delete as appropriate)

- Hypoglycaemia: the child must NOT be left on their own until the Hypo has been resolved. Hypoglycaemia should be treated where/when ever it occurs.
- _____ can/cannot assist with the practical aspects of their blood glucose testing but needs an adult to support/supervise and make the decision whether he/she is hypoglycaemic or hyperglycaemic and the action required.
- At times of snacks and meals _____ needs direct support to administer their dose of insulin via the controller.
- Awareness of where the Omnipod 5 device is situated on the child's body (small white rectangle shaped device). These areas are specific to individual children i.e. tummy, upper thighs, buttocks, back of arm.
- _____ does/does not require assistance after toilet visits or P.E. If clothes require changing, ensure the omnipod remains in situ.

CONTACT PARENTS IMMEDIATELY IF YOU SUSPECT THE OMNIPOD IS BECOMING UNSTUCK OR HAS COME OFF

This Health Care Plan has been devised so that those using it can navigate easily to the correct information and flowchart as required.

Signature of parent/carer	**Date**

Pupil's name	**Date of Birth**

Details of Routine Care:

Glucose levels should be checked at the following times (complete times as appropriate):

- Mid Morning –
- Pre-Lunch –
- Mid Afternoon –

READING	**ACTION**
4.0 – 13.9 mmol/l	1. Record BG in diary provided by parent. 2. Bolus for snack/lunch using Bolus Wizard **(see page 8)** Carbohydrate content will be clearly marked by parents. 3. It is important to ensure that the child eats the meal that they have had insulin for. If any concerns, contact parents.
Below 4.0 mmol/l 'Hypo'	1. Follow **Hypo**glycaemia flow chart 2. Observe child until hypo has resolved. It can take up to 45 minutes for full concentration to return following a hypo.
14.0 mmol/l or higher	1. Follow **Hyper**glycaemia flow chart

Details of Care for P.E.

1. Check blood glucose before activity.
2. If blood glucose is less than 4mmol/l follow the Hypoglycaemia flowchart before continuing.
3. If blood sugar is above 14mmol/l refer to the Hyperglycaemia flowchart before continuing.
4. If blood glucose is less than _____, give _____ a snack of ____gms. WITHOUT bolus of insulin.

N.B: Omnipod remains in situ all the time even during sports

Activity Mode on Omnipod 5

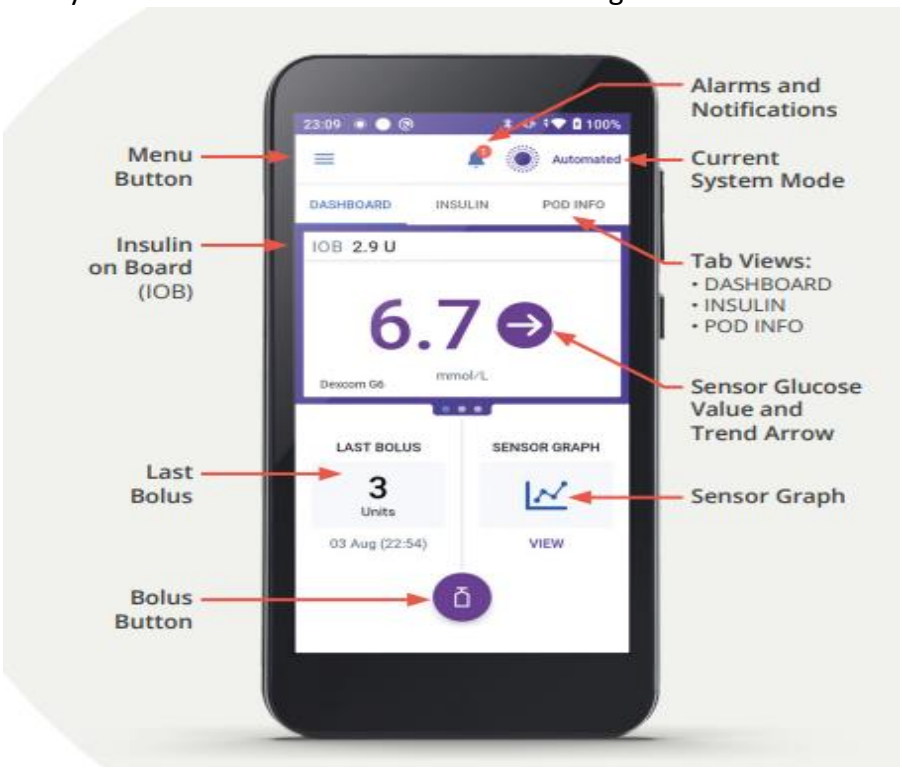
When using the Activity feature, SmartAdjust technology reduces the insulin delivery and sets your Target Glucose to 8.3 mmol/L for time you choose (up to 24 hours). We would recommend that you set Activity mode on for the 1-hour pre-PE, duration of PE and the hour post PE.

Signature of parent/carer	**Date**

Pupil's name	**Date of Birth**

Instructions for 'Omnipod' Insulin Pump:

The PDM (Personal handset) should be set with a personal pass code to **access** the main screen this as a safety measure between the times of delivering the boluses or making adjustments to the pump settings.



Unlocking The Handset

1.

Press the Power Button to display locked screen

2. **Swipe to unlock**
3. **Enter Pin:_____ Then press tick (√)**

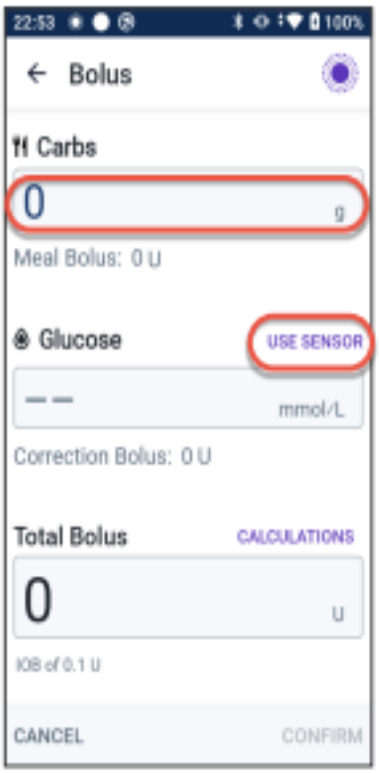
Pupil's name	Date of Birth

How to deliver a bolus via the PDM:

How to deliver a bolus

With the Omnipod 5 System, it is still important and necessary to bolus (deliver an insulin dose) for both meals and high glucose levels. It is ideal to start a meal bolus at least 15-20 minutes before eating to prevent hyperglycaemia.[1]

To start a bolus, tap the Bolus button



Tap on the **Carbs** field to enter the amount of carbohydrates to be eaten

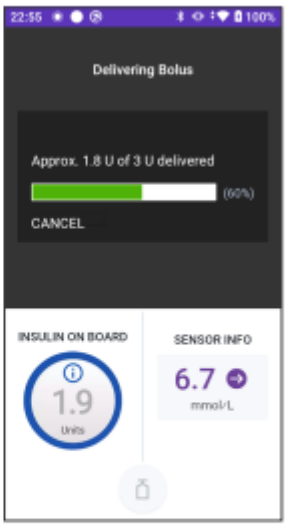
Tap **USE SENSOR** to use sensor glucose value and trend for a correction bolus*

Tap **CONFIRM**

Pupil's name	**Date of Birth**

Instructions for 'Omnipod' Insulin Pump, how to deliver a bolus continued:

Review the entries to ensure they are correct, then tap **START**



Confirm the screen says Delivering Bolus and shows a green progress bar before leaving the Omnipod 5 Controller

This Plan was completed on _____ and its contents agreed by the undersigned.

Pupil's name	Date of birth
School	

Parent/carer

I realise that the school is not obliged to undertake healthcare and that any healthcare provided by school will be carried out on a voluntary basis under the guidance of NHS staff. I give my consent to the information contained in this healthcare plan being shared with all staff working with my child. I give my consent for the school to contact the named health care professional(s) and for those professionals to advise the school in any relevant matters in connection with this. I accept full responsibility for keeping the school informed of anything that may be relevant in relation to the implementation of this care. I accept responsibility for ensuring that there are supplies of any relevant medication, materials or equipment for my child's needs.
I wish my child to have the care/medication detailed in this plan and I accept that the emergency services will be summoned, where appropriate, in the event that the school staff are unable to administer the plan at any time.

Name of parent/carer	
Signature	Date

Pupil

I agree to the care arrangements as detailed in this plan

Name of pupil	
Signature	Date

The Head teacher/ Designated member of senior management
I agree to the procedures detailed in this plan being administered by appropriately trained staff who have attended a Diabetes Management CPD session within the last two years.
In the event that these procedures cannot be implemented at any time, where appropriate, the school will follow advice received from the health professionals in summoning the emergency services.

Name of member of staff	
Signature	Date

Copies held by parent/carer and head teacher

This Plan was reviewed on _____ and its contents agreed by the undersigned.

Date of next review

Pupil's name	Date of birth
School	

Parent/carer

I realise that the school is not obliged to undertake healthcare and that any healthcare provided by school will be carried out on a voluntary basis under the guidance of NHS staff. I give my consent to the information contained in this healthcare plan being shared with all staff working with my child. I give my consent for the school to contact the named health care professional(s) and for those professionals to advise the school in any relevant matters in connection with this. I accept full responsibility for keeping the school informed of anything that may be relevant in relation to the implementation of this care. I accept responsibility for ensuring that there are supplies of any relevant medication, materials, or equipment for my child's needs.

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Signature	Date

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Name of member of staff	
Signature	Date

Copies held by parent/carer and head teacher

Insulin Pump Therapy in Schools Flow Chart to Manage HYPERglycaemia; Blood Glucose of 14.0 mmol/l or higher

Photograph of pupil

Name **Date of Birth**

Can show one or several of the following but sometimes there are no obvious signs;

- **Thirst**
- **Needing the toilet**
- **Tiredness**
- **Lack of concentration**

Check for Blood Ketones (BK) using Ketone Meter provided

Is Ketone reading more than 1.0?

YES

Contact Parents URGENTLY (See N.B. note below)

Please Note:

No Exercise if blood ketone value 0.5 – 0.9

Action:

- Correct Blood Glucose level via pump immediately i.e enter Glucose value and 0g carbs if not at a meal time
- Re-check Blood Glucose and Blood Ketones 1 hour later
- Contact parent IF blood ketones rise further

N.B.: If the child requires additional insulin to be administered via an insulin pen device and a pod change it is the parent's responsibility to manage this.

Insulin Pump Therapy in Schools Flow Chart to Manage HYPOglycaemia; Blood Glucose of Less Than 4.0 mmol/l

Photograph of pupil

Name **Date of Birth**

Can show one or several of the following but sometimes there are no obvious signs;

- Headache
- Pale
- Sweaty
- Tearful/weepy
- Nausea/vomiting
- Blurred vision
- Wobbly/shaky/weak
- Grumpy/bad tempered
- Feeling "not right"

Wash and dry child's hands then check blood glucose reading

Is reading less than 4.0 mmol/l?

NO → **No Action Required**

YES

Give fast acting Glucose Immediately:

Individual Treatment Plan:

Please Specify:

_____
_____
_____
_____

Is the child becoming uncooperative or losing consciousness?

YES

- **Dial 999 for an ambulance stating that the pupil has diabetes and has low blood glucose.**
- **Follow instruction given by ambulance control staff**
- **Contact parent/carer**
- **If the pupil becomes unconscious, place in recovery position.**
- **DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH**

NO → **After 10 – 15 minutes recheck Blood Glucose.**

Is reading still less than 4.0mmol/l?

YES

NO

N.B. If Hypo is not resolved after 3 cycles of treatment, contact parents for advice but continue the cycle of treat-

Notes:

1. **When using an insulin pump, once B.G. above 4mmol/l a snack is NOT essential. If giving a snack post hypo please deliver an insulin bolus for the carbohydrate about to be eaten.**