Watch me: How to use this careplan

Individual Health Care Plan

Name:

Age (years)

Insulin name:

DOB:

School:

Year Group:

Insert Photo here

Date of Plan:

Review Date: Ongoing

FAMILY CONTACT INFORMATION

Name		
Relationship		
Telephone number	**Home:** **Work:**	**Mobile:**
Email		
Name		
Relationship		
Telephone number	**Home:** **Work:**	**Mobile:**
Email		

Other essential contact information

JOB TITLE	NAME	TELEPHONE NUMBER
Paediatric Diabetes Nurse		
Paediatric Diabetes Nurse		
Diabetes Office no:		
Consultant		
GP		
Other relevant Health Professional		
Class Teacher		
School Nurse		
SEN Co-ordinator		
Other Relevant Teaching Staff		
Other Relevant Non-Teaching Staff		
Head Teacher		

Description of condition and details of individual treatment

Watch me: What is diabetes

- This young person has Type 1 Diabetes
- The young person manages their condition with a healthy diet, exercise and insulin injections
- Insulin injections are required as follows:

☑ Continuous subcutaneous insulin infusion (CSII) requires insulin with all meals & snacks

- **Glucose levels** need to be tested throughout each day
- Clinic appointments are every 3 months as a minimum, but may be more frequent
- In accordance with **National Guidance**, school staff should be released to attend diabetes training sessions

Glucose Monitoring

Watch me: Blood glucose monitoring
Watch me: Blood glucose test

The child/young person uses a Dexcom continuous glucose monitor (CGM). How to use the Dexcom is covered in the next few pages. There maybe times when a blood glucose test is required such as when Dexcom is not operating effectively or symptoms do not match the glucose reading on the Dexcom. At these times a blood glucose test will be required.

The child/young person has a blood glucose monitor, so they can test their blood glucose (BG). BG monitoring is an essential part of daily management: **THEIR EQUIPMENT MUST NOT BE SHARED AND SHOULD BE AVAILABLE AT ALL TIMES – NOT LOCKED AWAY.**

☐ This young person is NOT independent in glucose monitoring

☑ This young person is independent in glucose monitoring

Watch me: Lancet device (if performed by pupil only)
Watch me: Fastclix lancet device (if performed by school staff or pupil)
Watch me: Unistix lancet device (f performed by school staff)

This procedure should be carried out:

- In class or if preferred, in a clean private area with hand washing facilities
- **Hands must be washed prior to the test**
- **Gloves to be worn by the adult**
- Blood glucose testing lancets and blood glucose strips should be disposed of safely

Target range for blood glucose is 4.0 **to** 9.0 **mmol/L**

Watch me: Using the Dexcom & Omnipod 5

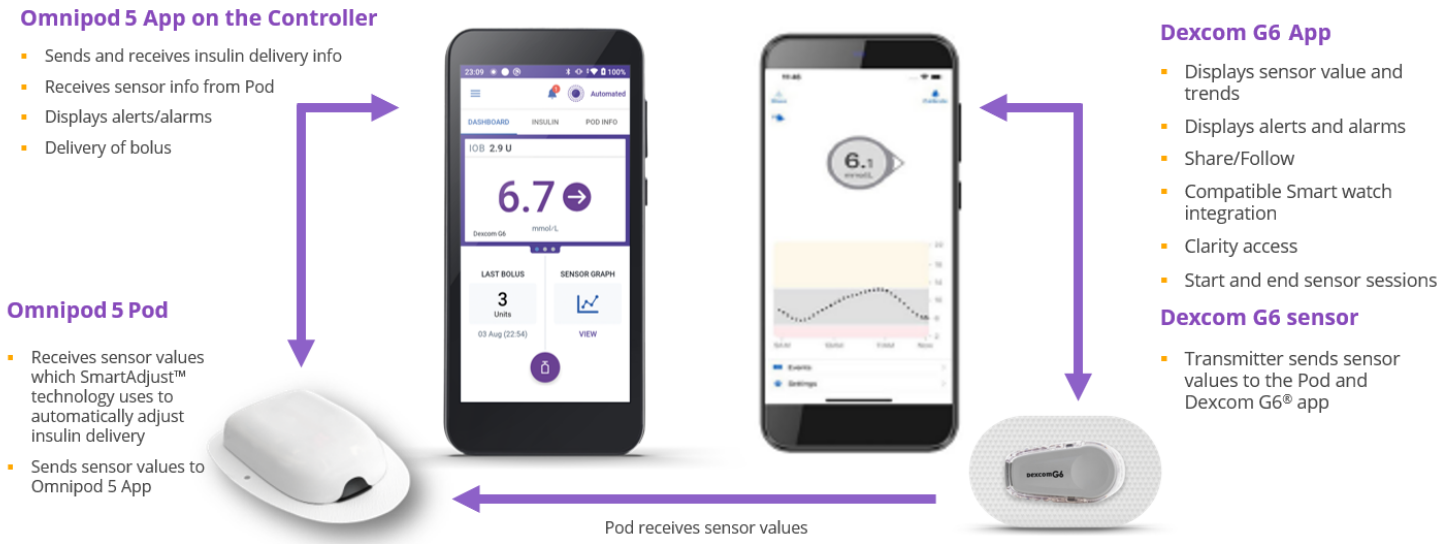
Glucose Monitoring

The child/young person has a continuous glucose monitor (CGM) that will update their glucose level every 5 minutes on a mobile phone or receiver. The CGM values completely replace the need to do blood glucose monitoring and can be trusted.

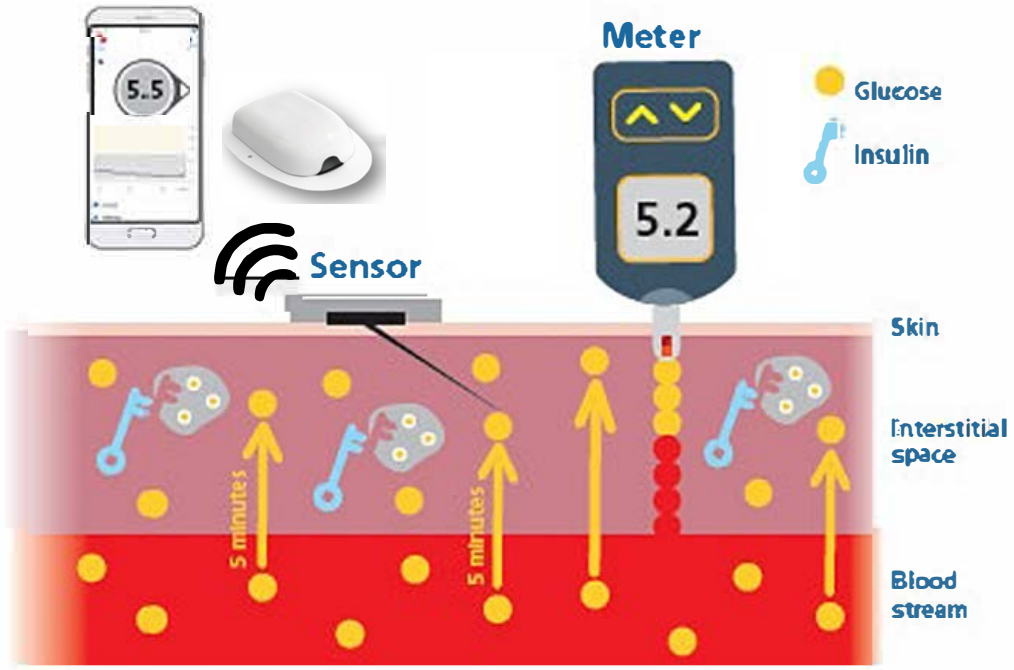
The only exception is if the child/young person feels **symptomatically different** to the CGM reading. Then a blood glucose reading should be performed. This should be a very rare occurrence. Therefore, they also have a blood glucose monitor, so they can test their blood glucose (BG) if they feel their CGM reading does not match with how they feel.

Monitoring Glucose is an essential part of daily management: **THEIR EQUIPMENT MUST NOT BE SHARED AND SHOULD BE AVAILABLE AT ALL TIMES – NOT LOCKED AWAY – THEY MAY ALSO NEED TO BE ABLE TO USE THEIR MOBILE PHONE DURING SCHOOL HOURS.**

This young person uses a Omnipod 5 insulin pump that has an integrated CGM using the Dexcom G6 (shown below). The young person will also have a mobile phone connected to the Dexcom so the readings can be transmitted for alarms**. The Controller is what you use to give insulin at mealtimes, and the phone is where the low and high alarms will sound that require action.**



Sensors and meters measure glucose in different places

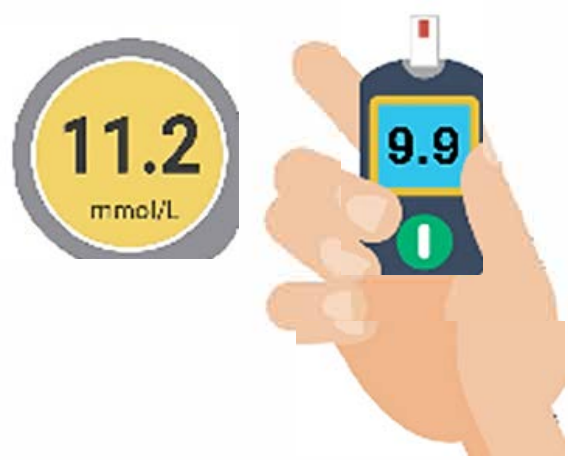


Accuracy

G6 readings and meter values may not be the same, and that's ok

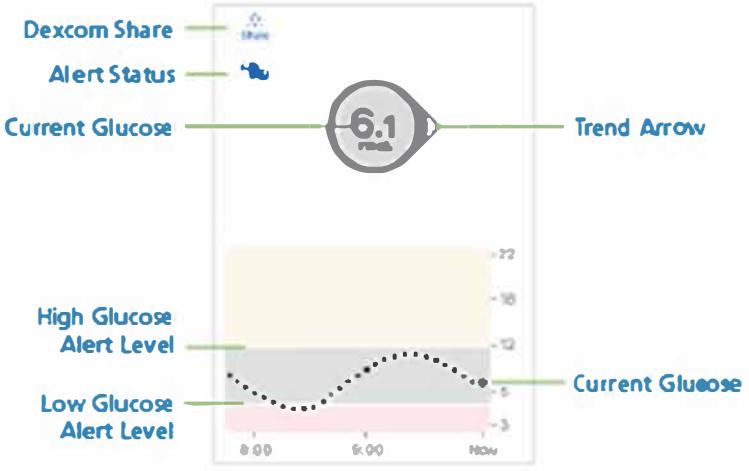
The G6 and a meter measure glucose from two different types of body fluids: interstitial fluid and blood.

CGM and meters both have a range in which they are considered accurate. Readings can be different and still fall into their accurate range.

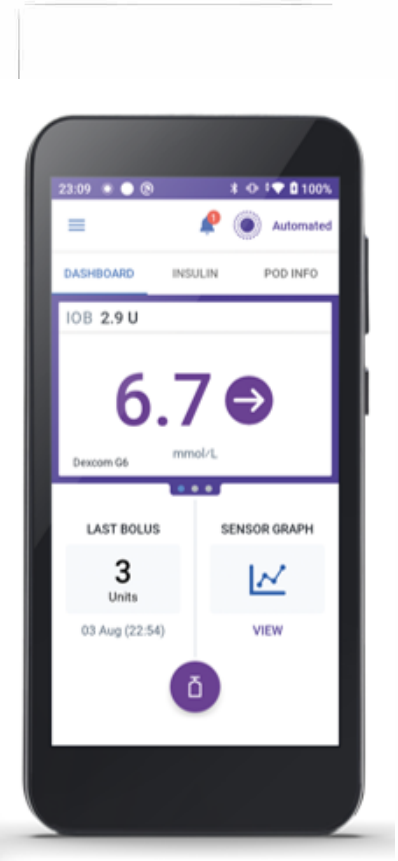


The CGM Display

- The trend arrows will help you predict where the glucose level will be in 10 minutes.
- The dotted line will allow you to see where the glucose has been in the last 1, 3, 6, 12 and 24 hours.
- The glucose value will be grey when in target, red when it's low, and yellow when its high.



Red = Low | Yellow = High | Grey = In Target



The glucose reading and trend arrow on the controller may be 5 minutes behind the phone from time to time.

This is ok, and will not cause any issues. For treating low glucose levels, use the phone readings.

What do the trend arrows mean?

- The CGM device will tell you how fast the glucose is moving by trend arrows
- The trend arrows allow you to predict where the glucose will be in 10 minutes
- You can use the trend arrows to:
    - Predict and prevent hypos.
    - Change carbohydrate amounts for exercise.
    - Give peace of mind that no highs are lows are coming up.
    - Decide when to give meal-time insulin.
    - And much more.

Trend arrow APP	Description	Where the glucose will be in 10 minutes
	Rapidly rising	more than 2.0mmol/l higher
	Rising	1.5mmol/l higher
	Slowly rising	1mmol/l higher
	Stable	Same
	Slowly falling	1 mmol/l lower
	Falling	1.5 mmol/l lower
	Rapidly falling	more than 2.0mmol/l lower

When you will need to test blood glucose levels

- There will be times when the difference between the CGM and blood glucose is greater than is acceptable:
    - o When there is a faulty sensor.
    - o When there is a faulty transmitter.
    - o When you are very dehydrated.
    - o When the device cannot pick up the sensor readings.
    - o If a calibration is entered that is inaccurate.

- You must test your blood glucose when:
    - o Your symptoms do not match the CGM reading.
        - You may feel hypo when the reading says 5.5mmol/l.
        - You may feel really high when the CGM reads 11.0mmol/l.
    - o There is no glucose value or arrow on the CGM device.

If you have both a CGM and blood glucose reading, use the blood glucose reading.

No number or arrow?
Use your meter

Symptoms don't match readings?
Use your meter

When you see	Notice
	No number
	No arrow
App  Receiver 	No number or arrow

Usual times to check CGM are:

☑ Before meals

☑ Before/ After P.E/Swimming

☐ Other times – please state:

Times to take action on the CGM readings and alarms

☑ When glucose level falls to 4.0 mmol/l a low alert sounds – Follow the hypoglycaemia flow chart

☑ When glucose level rises to 14.0 mmol/l a high alert sounds follow the hyperglycaemia flow chart

☑ Blood ketones should only be checked if the CGM stays above 14.0mmol/l for 90 minutes. A repeat alarm is set to notify if the CGM reading has been above 14.0mmol/l for 90 minutes. If the reading comes below 14.0mmol/l, no alarm will sound.

- Parents may follow the CGM readings by the Dexcom SHARE APP and will only contact when:
    - CGM reading has been below 4.0mmol/l for more than 45 minutes
    - CGM readings have been above 14.0mmol/l for more than 90 minutes

- If using the Dexcom APP by a mobile phone the pupil and parents must follow these rules whilst in school:
    - The phone is only to be used for the Dexcom APP
    - Parents not to contact the pupil by their mobile and go through official communication.

Insulin Administration

☑ Insulin to be given before eating lunch & snacks

☐ Insulin to be given independently by student

- Insulin dose varies depending on what is being eaten

Insulin Name:	

At meal times, the child/young person requires variable amounts of quick acting insulin, depending on how much they eat; insulin to carbohydrate ratio **(ICR)** and on what their blood glucose level is; insulin sensitivity ratio (**ISF** or often called a 'correction')

Insulin to carbohydrate ratio:	Calculated by the pump

Watch me: Carbohydrate counting

Insulin sensitivity ratio:	Calculated by the pump

Storage of insulin injections and Blood Glucose Kit

☐ Insulin to be kept in secure place in the classroom or other

☐ Insulin to be carried on person

☐ Blood glucose monitoring kit to be kept in the class room or other

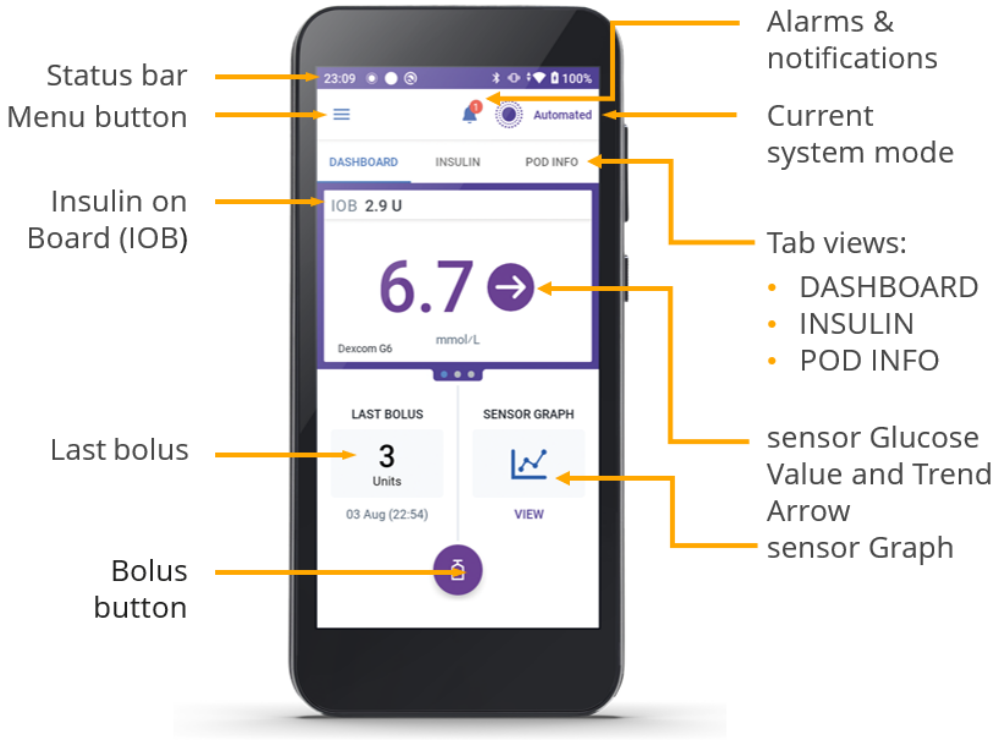
☐ Blood glucose monitoring kit to be carried on person

☑ All sharps to be disposed of in a sharps box

Pump navigation and how to deliver a bolus - Watch me

Tasks to practice:

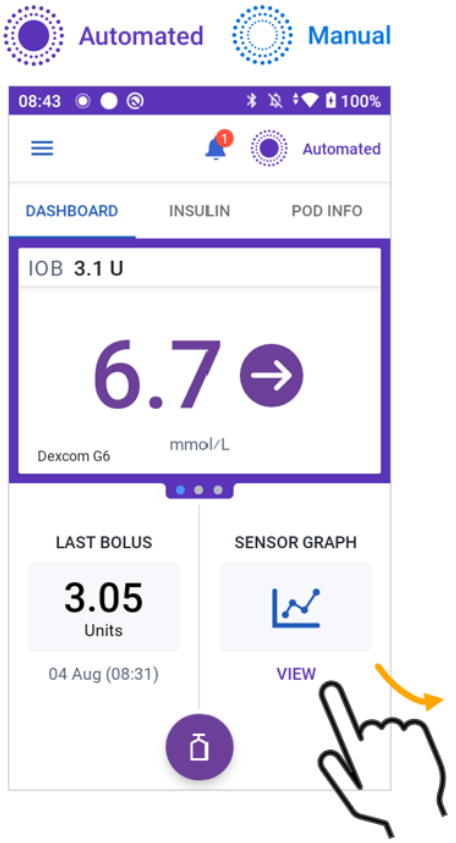
1. Download the **Omnipod 5 Simulator** from the App store
2. Select "Try the Simulator"
3. Select "Everyday Use"
4. Practice using the next few pages:
    a. Viewing Sensor graph
    b. Giving a bolus
    c. Checking notifications

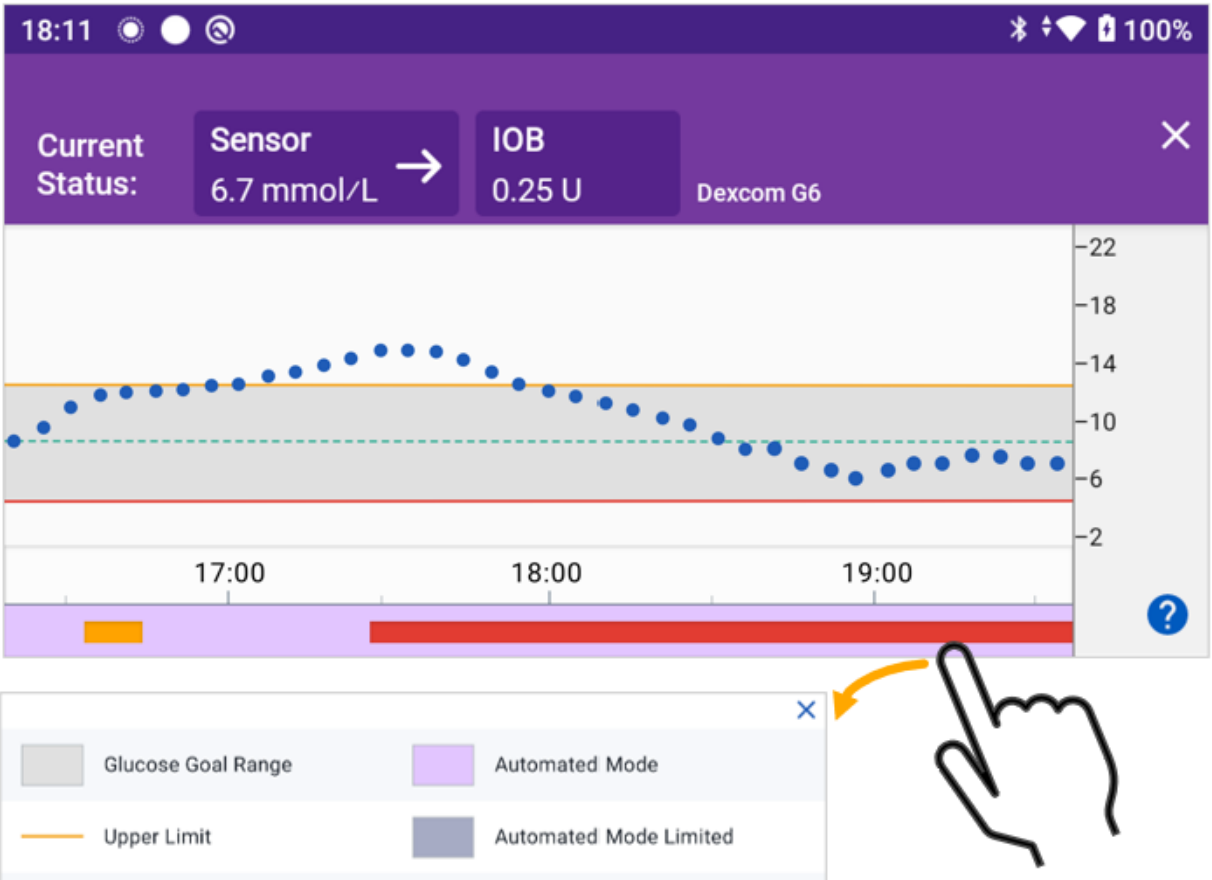


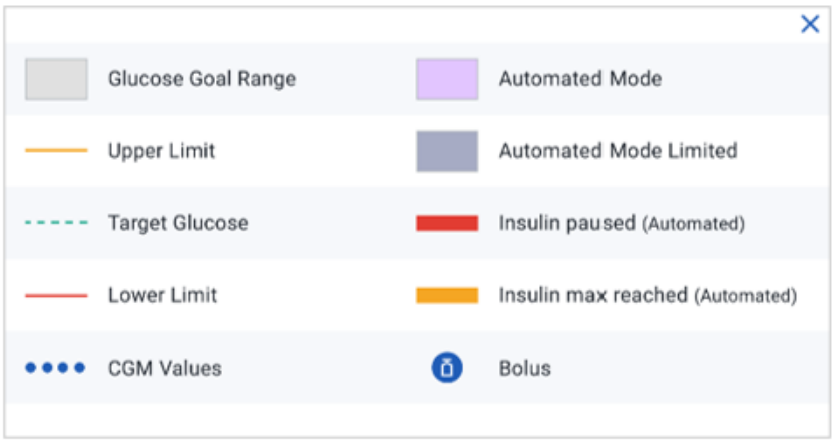
sensor Value Color Key

The sensor value and trend arrow will change color depending on your Glucose Goal Range

- sensor value within Glucose Goal Range (Manual Mode)
- sensor value within Glucose Goal Range (Automated Mode)
- sensor value below Glucose Goal Range (Automated & Manual Mode)
- sensor value above Glucose Goal Range (Automated & Manual Mode)

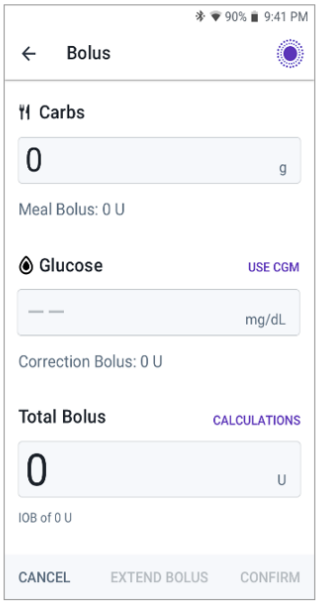

Automated
Manual
08:43
100%
Automated
DASHBOARD
INSULIN
POD INFO
IOB 3.1 U
6.7
Dexcom G6
mmol/L
LAST BOLUS
3.05
Units
04 Aug (08:31)
SENSOR GRAPH
VIEW

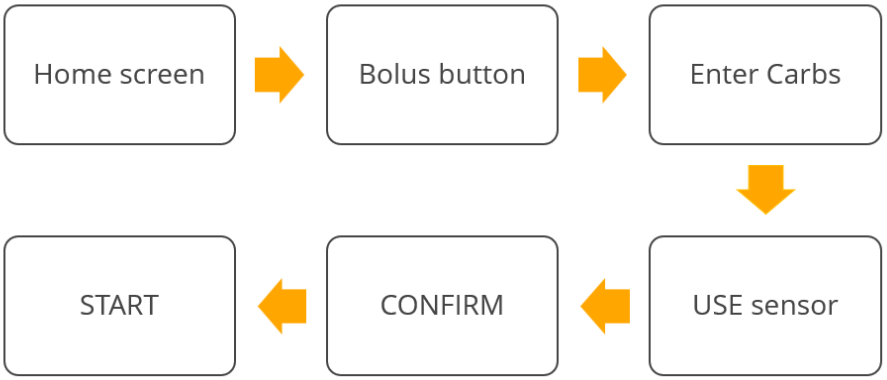

18:11
100%
Current Status:
Sensor
6.7 mmol/L
IOB
0.25 U
Dexcom G6
22
18
14
10
6
2
17:00
18:00
19:00


Glucose Goal Range
Automated Mode
Upper Limit
Automated Mode Limited
Target Glucose
Insulin paused (Automated)
Lower Limit
Insulin max reached (Automated)
CGM Values
Bolus

Bolus Delivery

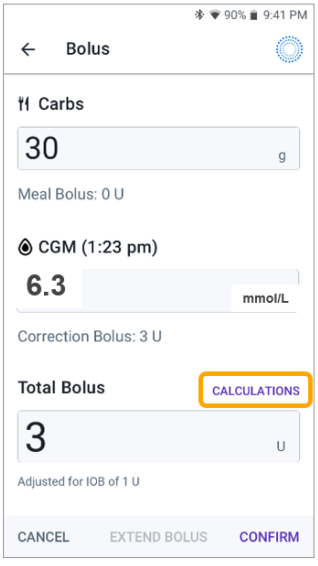
Automated Manual

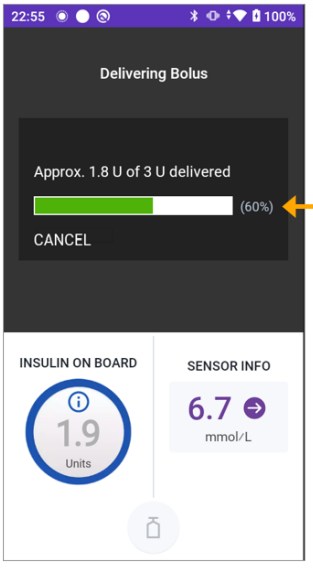




Bolus Tips

Tapping "calculations" will provide a mathematical breakdown of the suggested bolus





Always look for the progress bar to confirm bolus delivery before navigating away from the Omnipod 5 App

Watch me: from 1 minute 50 seconds to 3 minutes 5 seconds

System Modes

Automated

Automatic adjustment of insulin delivery every 5 mins

Requires active Pod and connected sensor

Manual

- Delivery of insulin based on programmed basal rates
- Used with or without sensor

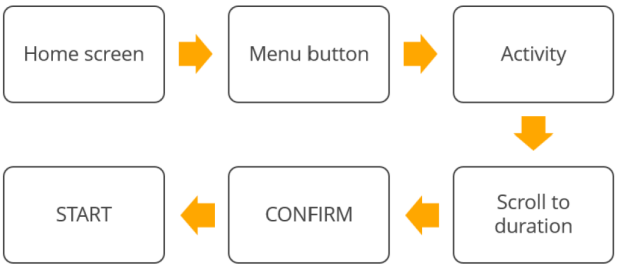
Suggested Daily Routine

Watch me: Daily routine

	Time	Notes
Arrive School	09:00	Check glucose level if have cycled or walked to school
Morning Break	10:15	Check glucose level and give correction if above target level and for carbohydrate if eating
Lunch	12:00	Check glucose level 15 minutes before lunch, count the meal carbohydrate and administer the insulin
Afternoon Break	14:00	Check glucose level and give correction by the pump
School Finish	15:15	Check glucose level if agreed with parents or if requested by Diabetes Home Care.
Other		

PE Guide for Omnipod 5 Watch me

1. Enter weight in kilograms into this box 30
2. Start Activity Feature 90 minutes before activity ideally, or just before, and set to finish at the end
3. Check glucose just before and every 20-30 minutes during exercise and follow the chart below



Sensor glucose Levels	Rate of glocose change trend arrow & action to take	Carbohydrate grams needed for 20-30 mins	Dextrose (3g)	Lucozade
ess t n 0 mmol/l	No exercise: Treat hypoglycaemia	9	3	100
0 - 6.4 mmol/l	↓↓	10	3	111
	↓	8	3	89
	↘	7	2	72
	→	5	2	56
	↗	4	1	39
	↑	2	1	22
6.5 - 9.9 mmol/l	↓↓	8	3	89
	↓	7	2	72
	↘	5	2	56
	→	4	1	39
	↗	2	1	22
10.0 - 13.9 mmol/l	O to e ercise it n rro			
>14.0mmol/l	Check ketones: If less than 0.6mmol/l	Ok to exercise		
	Chck ketones: If 0.6mmol/l or above	o e ercise unti t e etones e een corrected nd re ess t n 0 mmo		

Hypoglycaemia (Low Blood Glucose) Management

BELOW 4.0 **mmol/L**

Watch me: hypoglycaemia

Tick the symptoms the young person currently experiences when hypoglycaemic. These symptoms may change over time and require updating.

If any of these symptoms are displayed check blood glucose immediately.

Sweating	☐	Pallor	☐
Trembling	☐	Anxiety	☐
Weakness	☐	Headache	☐
Confusion	☐	Sleepiness	☐
Slurred speech	☐	Blurred Vision	☐
Personality Change	☐	Nausea and Vomiting	☐

Note any other symptoms

- **Check blood glucose to confirm hypo, and treat promptly**
- **Do not move the location of the young person to treat a hypo**
- Hypos are described as mild, moderate or severe depending on this young person's ability to treat themselves
- The aim is to treat, and restore the blood glucose level to 4.0 mmol/L or above

A hypo box should be kept in school. Contents of hypo box should include:

Fast acting glucose

Glucogel

- All staff must be aware of where the hypo box is kept
- The hypo box should be taken with the young person if moving around the school premises
- **It is parents responsibility to ensure that the hypo box is adequately stocked**

ALWAYS TREAT THE HYPO THEN CONSIDER WHAT HAS CAUSED IT:

- Too much insulin?
- Not eating enough carbohydrates?
- Missed or delayed meal?
- Intense exercise?

Severe Hypoglycaemia:

- This is where the young person is unconscious, having a seizure or is unable to take fast acting glucose orally
- This is an **extremely rare occurrence** but we need to make you aware
- How to manage severe hypoglycaemia is on the flow chart on the next page

Watch me

Preventing or treating hypoglycaemia flow chart

('Hypo' or Low 'Blood Glucose')

In any of the below circumstances please refer to the **Mild Hypo** green box (as long as the child is conscious & cooperative):

1. Low glucose alarm sounds
2. Glucose value below 4.0mmol/L
3. Glucose 4.0-6.0mmol/L with a downward trending arrow at usual times of checking e.g. break-time, lunch, mid afternoon

Mild Hypo

The child can eat and drink and is cooperative

Step 1:

Using the glucose value and arrow, treat or prevent hypoglycaemia using **one** of the options from the table below (options can be changed)

Glucose mmol/L	Arrow	Treatment	Choose only one	
		ucose r ms	Dextrose (3g)	Lucozade
4.0 - 6.0	↓↓	9	3	100
	↓	7	2	75
	↘	5	2	50
Less than 4.0	↓↓	11	4	125
	↓	9	3	100
	↘	7	2	75
	→	5	2	50
	↗	2	1	25

Step 2: Look at CGM in 20 minutes .

Step 3: If CGM is still below 4.0mmol/L after 20 minutes, repeat 1& 2

Moderate Hypo

The child is conscious but not cooperative

Step 1: Give one tubes of GlucoGel®

Step 2: Look at CGM in 20 minutes.

Step 3: If CGM is still below 4.0 mmol/L after 20 minutes repeat Steps 1 & 2.

Severe Hypo

The child is unconscious and/or having a seizure and so unable to swallow

Step 1: Place child in the recovery position.
Step 2: Ensure the airway is open and that the child is breathing.
Step 3: Call 999 and Stay with the child while someone waits to direct the ambulance and informs parents.

Hyperglycaemia (High Blood Glucose) Management

14mmol/L or above

Watch me: Hyperglycaemia

Tick the symptoms the young person currently experiences when hyperglycaemic.
These symptoms may change over time and require updating.

If any of these symptoms are displayed check blood glucose immediately.

Excessive Thirst
Tiredness/lethargy
Nausea & vomiting
Weight Loss

Passing urine frequently
Blurred vision/headache
Abdominal pain
Changes in behaviour

Note any other symptoms

General advice when managing hyperglycaemia

- If this young person is well there is no need to send him/her home
- Parents should be informed that this young person has had high blood glucose levels
- This young person should be encouraged to drink sugar free fluids
- This young person should be allowed to use the toilet as needed
- This young person should not exercise if his/her blood glucose level and ketones are high:
    - Blood glucose 14mmol/L or above and ketones 0.6mmol/L or above

Watch me: What are ketones?

Advice for hyperglycaemia with illness

- If has high blood glucose levels and:
    - Ketones > 1.5mmols
    - Headaches
    - Abdominal Pain
    - Nausea or Vomiting

CONTACT PARENTS IMMEDIATELY

- The young person needs to be taken home
- Parents need to monitor blood glucose and ketone levels
- Extra insulin will be required
- Parents should contact the diabetes team for advice

Watch me

Hyperglycaemia Flowchart

('Hyper' or 'High blood glucose')

Step 1: Notified CGM above 14mmol/l by first alarm. Give a correction by the pump

Step 2: Wait 90 minutes

Step 3: Act if alarms after 90 minutes as still above 14.0mmo/l - Check for Ketones

Signs and symptoms can include:

Excessive Thirst
Tiredness/lethargy
Nausea & vomiting
Weight Loss

Passing urine frequently
Blurred vision/headache
Abdominal pain
Changes in behaviour

Watch me: How to do a ketone test

High blood glucose 14mmol/L or above
Blood ketones less than 0.6mmol/L

→

Step 1: Drink sugar free fluids.
Step 2: Correct blood glucose by the pump.
Step 3: Check blood glucose levels 1-2 hours later.

High blood glucose 14mmol/L or above
Blood ketones 0.6 – 1.5mmol/L
Child well and no vomiting/child unwell

→

Step 1: Drink sugar free fluids.
Step 2: Correct high blood glucose and ketone levels with corrective dose by INJECTION, as advised by Diabetes Home Care or parents, and change cannula.
Step 3: Contact parents or Diabetes Home Care to discuss action if unwell.
Step 4: Check blood glucose levels 1-2 hours later.

High blood glucose 14mmol/L or above
Blood ketones over 1.5mmol/L
Child and/or unwell/vomiting

→

Step 1: Contact parents to collect as child SHOULD NOT BE IN SCHOOL.
Step 2: If vomiting and/or having difficulty breathing call 999.
Step 3: Correct high blood glucose and ketone levels with corrective dose of insulin by INJECTION and change cannula.

Watch me

Please use this box for any additional information

SUPPLIES TO BE KEPT AT SCHOOL

2 x Pods

1 x quick acting insulin cartridge – to be kept in fridge

1 x quick acting insulin pen

10 x insulin pen needles

Spare finger testing device & lancets

USB charing cable for the controller

Spare batteries for blood glucose meter

Blood glucose testing strips

1 x ketone meter & 5 testing strips

Hypo treatment

2 x glucogel tubes

P.E. Treatment

Sharps bin: If the school is within Birmingham City Council, please call 0121 303 1112. If not in Birmingham City Council refer to local authorities clinical waste policy.

I give permission to the school nurse, trained diabetes personnel, and other designated staff to perform and carry out the diabetes care tasks as outlined by this Diabetes Health Care Plan.

I also consent to the release of the information contained in this Diabetes Health Care Plan to all staff members and other adults who have custodial care of my child and who may need to know this information to maintain my child's health and safety.

Omnipod 5 Alerts & Alarms **Watch me**

Alarms and Notifications

Hazard Alarms

High priority alarms that indicate a serious problem has occurred and a Pod change may be needed

Advisory Alarms

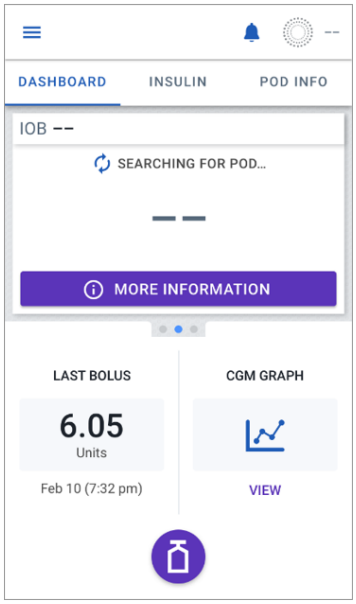
Lower priority alarms that indicate a situation exists that needs attention

Reminder Notifications

Reminder of an action that should be performed

"Check Alarms" within Settings verifies that the Omnipod 5 App and Pod's alarms and vibration functions are working properly. This also helps to distinguish between the alarm types. This can be done in Manual Mode when insulin is paused.

No Pod Communication

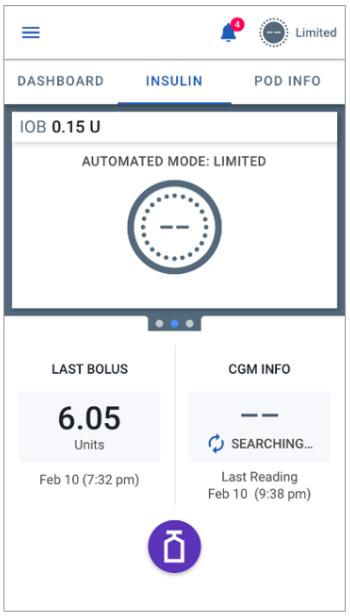


- Pod communication was not established with the Omnipod 5 Controller

What should you do?

- Depending on the communication issue, the Omnipod 5 Controller offers you options to help you resolve it. It is in your best interest to leave any options to DISCARD or DEACTIVATE POD as the last choice after trying the other option(s)
- Move the device with the Omnipod 5 Controller closer to the Pod
- Tap MORE INFORMATION for potential causes and suggested actions

Missing sensor Values in Omnipod 5

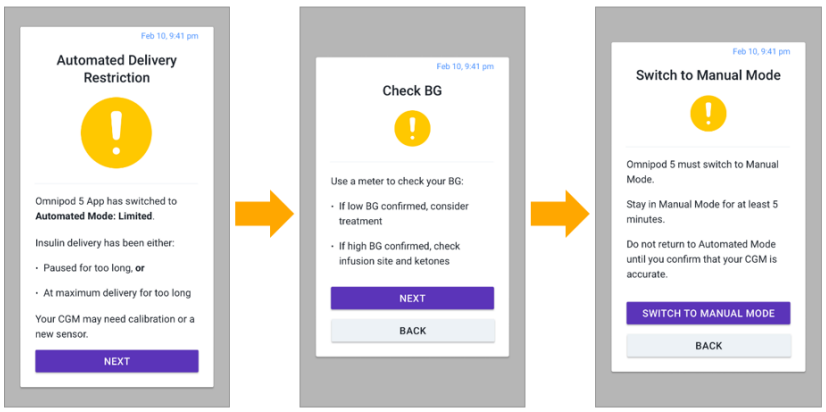


- Pod is no longer receiving sensor values
- After 20 minutes, system shows “Automated Mode: Limited” and is not fully automating basal delivery
- When the System enters Limited state, SmartAdjust™ technology never gives more than the Basal Program that would be active in Manual Mode
- When sensor communication is restored, full automated insulin delivery resumes

What should you do?

- Make sure the Pod and sensor are in direct line of sight
- Check the Dexcom G6 app to see if sensor values are still being received

Automated Delivery Restriction Advisory Alarm



- Only occurs in Automated Mode
- Insulin has been paused for too long, or delivering the maximum amount for too long

What should you do?

- Confirm your BG using a meter
- Follow screens and confirm your blood glucose
- Switch to Manual Mode for at least 5 minutes

Plan Approved By:	Name	Signature	Date
Young Person			
Parents/ Guardian			
Diabetes Team Member			
School Representative			
School Nurse			

Who is responsible in an Emergency?

- School staff will take the action detailed above
- Parents should attend school when requested to do so