Guidelines for the Prescribing of Continuous Glucose Monitors

NHS Kent and Medway

This document is designed to cover the key information around the prescribing of continuous glucose monitoring devices in NHS Kent and Medway. The key points are on the 1st page, with further supporting information such as access to training expanded upon within the rest of document.

Version	Updates
1	Draft – ICB medicines optimisation team
1.1	Updated based on comments from EKHUFT, DVH, ICB MO team. Sent for comments to IMO-DWG, HCP MOGs, IDDN clinical contacts, KMMOG and IMOSG. Clarity on NICE guidelines for insulin treated diabetes in pregnancy, links updated, secondary diabetes needing insulin also added

Definitions

Continuous Glucose Monitoring (CGM) systems can be categorised into:

- **Real-time continuous glucose monitoring** (rtCGM)
- **Intermittently scanned continuous glucose monitoring** (isCGM, commonly referred to as 'flash')

BGM - blood glucose meter (also known as capillary blood glucose)

MDI - **Multiple daily injection** = two or more daily insulin injections which could either be a basal-bolus regimen or more than one daily insulin injection.

Not in the scope of this document

This guideline outlines the criteria for use of CGM devices that can be prescribed on FP10 only. The use of CGM devices that cannot be prescribed on FP10 and part of hybrid closed loop systems are outside of the scope of this document.

NB this document will be updated as CGM devices are updated and their suitability for prescribing is reviewed Key Information

1) **Offer adults with type 1 diabetes a choice of real-time continuous glucose monitoring (rtCGM) or intermittently scanned continuous glucose monitoring (isCGM, commonly referred to as 'flash'), based on their individual preferences, needs, characteristics, and the functionality of the devices available. As per NICE guidelines NG 17. This also covers pregnant patients as per NICE guidelines NG3.**
2) **i) Offer intermittently scanned continuous glucose monitoring (isCGM, commonly referred to as 'flash') to adults with type 2 diabetes on multiple daily insulin injections (MDI) and only if any of the following apply:**
   - **they have recurrent hypoglycaemia or severe hypoglycaemia.**
   - **they have impaired hypoglycaemia awareness.**
   - **they have a condition or disability (including a learning disability or cognitive impairment) that means they cannot self-monitor their blood glucose by capillary blood glucose monitoring but could use an isCGM device (or have it scanned for them).**
   - **they would otherwise be advised to self-measure at least 8 times a day.**

   ***ii)* Offer isCGM to adults with insulin-treated (*not limited to MDI as per NICE*) type 2 diabetes who would otherwise need help from a care worker or healthcare professional to monitor their blood glucose.**
- **Consider real-time continuous glucose monitoring (rtCGM) as an alternative to isCGM for adults with insulin-treated type 2 diabetes if it is available for the same or lower cost.**

3) **CGM should be provided by a team with expertise in its use, as part of supporting people to self-manage their diabetes as per NICE but see information around initiation below.**
4) **Consider rtCGM for pregnant women who are on insulin therapy but do not have type 1 diabetes, if:**
   i.they have problematic severe hypoglycaemia (with or without impaired awareness of hypoglycaemia) *or*
   ii.they have unstable blood glucose levels that are causing concern despite efforts to optimise glycaemic control.
   b. For pregnant women who are using continuous glucose monitoring (CGM), a member of the joint diabetes and antenatal care team with expertise in these systems should provide education and support (including advising women about sources of out-of-hours support) as per NICE guidelines NG3. After this period there should be a review and CGM stopped if no longer required and meeting any other criteria. Specialist teams will advise if this is needed and duration of prescribing
5) **Where a person does not meet any of the above criteria, follow blood glucose testing guidelines if indicated and CGM is not recommended. Furthermore, people living with type 2 diabetes who may no longer meet criteria for CGM (e.g. MDI insulin no longer required) must be reviewed with a view to stop CGM. Where a person who does not meet any criteria, but a specialist considers CGM to be clinically indicated the route of an individual funding request remains an option. *NB there maybe patients with insulin treated secondary diabetes (eg Cystic fibrosis, type 3c diabetes) who are also suitable for these devices. This will be advised by specialist teams***
6) **For paediatric patients (type 1 diabetes or type 2 diabetes) it is expected that a specialist team, where they feel a prescribed device is suitable, will initiate the initial supply. It is reasonable that where a device can be prescribed that primary care can take on the on-going prescribing, but reviews will take place by specialist teams. This is in line with NG18.**
7) **A "contract" is no longer required for any of these devices, but healthcare professionals must review the patient in line with NICE guidance to ensure that they are continuing to benefit from the device and review if they are having any problems with the device.**
8) **Where multiple CGM devices meet patient needs or preference, use the one with the lowest cost (as per NICE recommendations).**

9) **The healthcare professional who is recommending a CGM device upon reviewing the patient is responsible for the first supply and arranging any suitable training for the patient before primary care takes on any on-going prescribing. There must be enough supply made before primary care can take on prescribing.**
10) **The formulary status for these devices (listed below) is "specialist initiation". These specialists can be healthcare professionals in secondary care, community, or primary care healthcare professionals who have undertaken appropriate training for the initiation and monitoring of these devices (see guideline and document attached for further information on this) and can make shared decisions with patients.**
11) **Patients should be prioritised based on clinical need and reviewed at their next annual review, unless there is a need to review their current blood glucose monitoring devices.**
12) **Patients will still need to be prescribed blood glucose test strips, but it is expected that the quantity will be significantly less (please also be aware of DVLA requirements in the link below). This can be individual to patients but see other Kent and Medway documentation (see link to BGM below) for a guide for quantities.**
13) **Patients are expected to move on to using formulary blood glucose meters (BGM) within Kent and Medway. These meters are those which form part of NHS England "Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets"**

Further Information

- Consider previous patient attendance, or give due consideration to future attendance, at a Type 1 diabetes structured education programme.
- Letters from specialists recommending that primary care takes on the prescribing of any of these devices must contain the necessary information needed to continue prescribing in primary care such as quantities to prescribe, and education and training given to the patient. Also, where appropriate, when the patient will be reviewed and any changes to blood glucose testing.
- **Education** on CGM should be provided by the person initiating the new device. This is usually by signposting to online training. Where a patient cannot access online training some companies will offer face to face training. Please see contact information below.
- For patients with type 2 diabetes, unless seen by community or secondary care due to complexities, it would be the responsibility of the healthcare professional who manages the diabetes to review and initiate CGM with appropriate training. ***Referrals should not be made for people living with type 2 diabetes for the sole reason to initiate CGM unless the patent is already under secondary or community care caseload***.
- CGM sensors should be aimed to be used at least 70% of the time. Where this does not happen, reasons for this should first be explored with the patient by the diabetes healthcare professional in line with NICE recommendations making shared decisions about any problems they may be facing and look at ways to address any problems or concerns to improve their use of the device, including further education, emotional and psychological support or alternative CGM devices that may suit the patient.
    - Continuation for prescribing should be based on improved patient outcomes and engagement with use of the CGM device. Deprescribing should be considered where there is a continued lack of engagement with the use of these devices following review of all options of support, as part of shared decision making with the patient. Other criteria indicating review where deprescribing may be considered:
        - Evidence of no longer meeting the NICE suitability criteria (e.g. insulin stopped in a patient with type 2 diabetes) where CGM is prescribed.
        - No evidence of sustained improvement in patient outcomes following initiation of CGM e.g. increased time in range, reduction in Hba1c, reduction in hypoglycaemia events.
    - The suitability of device should be assessed at each review, and consideration given to stepping down to less intensive forms of glucose monitoring if clinically appropriate.

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Key differences between the different CGM devices and key prescribing information

(In no particular order - prescribable devices which are on formulary in Kent and Medway as of January 2025)

CGM system	Type and other key information	Further key information
FreeStyle Libre 2 (BEING DISCONTINUED AUGUST 2025)* **(See sensor request form and other links in FreeStyle Libre 2 Plus box below).**	- isCGM. **Since August 2023 FreeStyle Libre 2 can operate as a rtCGM and does not require scanning if using a smartphone. Latest version of software needed - patients can still scan if preferred.** - 1 sensor lasts 14 days, 2 sensors for 28 days – **maximum 26 sensors to be prescribed per year.** - PIP code: 416-3416 - Scanning via app on compatible smartphone or reader. - No transmitter required.	**(SEE BOX BELOW for FREESTYLE LIBRE 2 PLUS- consider changing to Freestyle Libre 2 plus before August 2025)** - Pharmacies can order the sensors through the following link: https://www.freestylelibrepharmacyportal.co.uk/ - Sensors should be applied to the back of the upper arm. - MHRA alert on managing skin reactions - Sensor warm-up time is 1 hour.
FreeStyle Libre 2 Plus	- **rtCGM when used with the LibreLink smartphone app (no scanning required with smartphone).** - **isCGM when used with a FreeStyle Libre 2 reader (scanning required with reader).** - 1 sensor lasts ***15 days***, 2 sensors for 30 days – **maximum 24 sensors to be prescribed per year.** - PIP code: 428-0194 - No transmitter required.	- Sensor request for primary care :to support initiation https://order.freestylediabetes.co.uk/patient-primary-care - Most patients use the app on their compatible smartphone. - For patients without a compatible smartphone, readers are available free of charge. Please contact Abbott for these. - Pharmacies can order the sensors through the following link: https://www.freestylelibrepharmacyportal.co.uk/ - If there is a problem with the sensor (faulty or falls off), Abbott should be contacted directly by the person using the sensor/carer. Advise to contact Abbott Customer Careline on 0800 170 1177 on the day that a problem is identified. The displaced/faulty FreeStyle Libre 2 Plus sensor should be kept and instructions of the Abbott Customer Careline representative should be followed. - If a replacement sensor is issued, these should be received from Abbott within 3-5 days. - Sensors should be applied to the back of the upper arm. - Minimum age of user: 2 years. - Sensor warm-up time is 1 hour. - Patient can share glucose data with healthcare professionals via the LibreView web platform. - Patient education: FreeStyle Libre academy: https://pro.freestyle.abbott/uk-en/home/primary-care.html - Healthcare professional information: https://app.livestorm.co/abbott-uk-sales-team/national-freestyle-libre-2-system-product-training

Dexcom ONE **PLANS TO BE DISCONTINUED in 2024/25 so START PATIENTS ON DEXCOM ONE+ instead (see below) ****	- rtCGM - 1 sensor lasts 10 days, 3 sensors for 30 days - **maximum 36 sensors to be prescribed per year.** - PIP code 421-4722 - Need to prescribe one transmitter. Use variable repeat prescription so it can be ordered by a patient but not issued every month or consider acute prescriptions every 3 months. Practices should regularly review ordering of this item. Maximum 4 transmitters per year. PIP code: 421- 4730 - Reader via manufacturer if no smartphone	- Information on faulty sensors below (Dexcom ONE+ section). - Each transmitter should last 90 days therefore individuals should not require a transmitter to be prescribed every one or two months. If the transmitter stops working, the individual should be advised to contact Dexcom technical support directly on 0800 0315763. Transmitters hold a warranty for 90 days post insertion, product defects can be reported to Dexcom technical support directly via the website - https://www.dexcom.com/en-gb/contact-us-direct. Lost transmitters are not covered under this warranty and would not be replaced by Dexcom in most circumstances. - Practices and pharmacies should have systems in place to check for any ordering and prescribing of transmitters. Concerns around overordering should form part of on-going discussion with patients as part of their clinical care. - 120-minute sensor warm-up time. - Sharing of data to healthcare professionals via Dexcom ONE Clarity app - should form part of initial consultation when setting patient up on system. Data cannot be shared with friends and family. - Patient training for Dexcom ONE: https://www.dexcom.com/en-GB/dexcom-one-learn-the-basics?one=two&three=four
Dexcom ONE+	- rtCGM - 1 sensor lasts 10 days plus 12-hour grace period, 3 sensors for 30 days - **maximum 36 sensors to be prescribed per year**. - PIP code 426-8058 - **Readers** are available via manufacturer if no compatible smartphone. See contact information below(FAQ).	- Faulty sensors (including those that fall off early and those that stop working) should be reported to the Dexcom technical support team directly on 0800 031 5763 or complete a Product Support Request Replacements will be posted to the home address directly on a case-by-case basis. - 30-minute sensor warm-up time. - Sharing of data to healthcare professionals via Dexcom Clarity App - should form part of initial consultation when setting patient up on system. - Data can be shared with up to 10 friends and/or family. - **Patient training**: https://www.dexcom.com/en-gb/dexcom-one-plus-learn-the-basics - **Check smartphone compatibility here** https://www.dexcom.com/en-gb/compatibility/d1 - Need to connect to computer with Dexcom Clarity to enable transfer of data.
GlucoRx AiDEX	- rtCGM	- If the sensor falls off, a new sensor should be applied (if the transmitter falls off this can be reattached without applying a new sensor) and ensure patients are wearing the overpatch on a hair-free area. Cleaning the skin

	- 1 sensor last 14 days, 2 sensors for 28 days - **maximum 26 sensors to be prescribed per year.** - PIP code: 419-6127 - Transmitter last 4 years - cannot be prescribed - see next column for ordering information. - No reader.	prior to attaching the sensor with an alcohol wipe (can be purchased over the counter) will help the sensor stay on. - If there is a problem with the sensor e.g. stops working, patients should be advised to contact the customer care team on 0800 007 5892, email: orders@glucorx.co.uk or via LiveChat at: www.glucorx.co.uk . GlucoRx will not replace sensors that fall off, or those deemed faulty. - 60-minute sensor warm up time. - Patients can order free replacement transmitters from the customer care team on 0800 007 5892, email: orders@glucorx.co.uk or via LiveChat at: www.glucorx.co.uk - Patients on this rtCGM device will still need to capillary blood glucose test for treatment decisions - may not be suitable for people with type 1 diabetes. - Data sharing via GlucoRx AiDEX app and with family and carers - should form part of initial consultation when setting patient up on system. - Patient training: https://glucorxaidex.com/courses/glucorx-aidex-academy/

FreeStyle Libre 2 is being discontinued in August 2025 . Moving patients onto FreeStyle Libre 2 Plus is recommended if still clinically suitable - this requires a changing of repeat prescription and stopping previous FreeStyle Libre 2. Patients must use up existing supplies of FreeStyle Libre 2 to avoid wastage.

***** Dexcom ONE is likely to be discontinued. For patient instructions to change to Dexcom ONE+ an app update will be needed by the patient. The patient's medication screen will need to be changed and previous Dexcom ONE stopped. Patients must use up existing supplies of Dexcom ONE and transmitters to avoid wastage.***

For further information, please also see:

- Diabetes Specialist Nurse Forum UK comparison chart
- Also see manufacturer websites and manuals for use. Key contacts in FAQ section below

Frequently Asked Questions (FAQs)

What devices are available on prescription?

As of January 2025, FreeStyle Libre 2, FreeStyle Libre 2 Plus, Dexcom ONE, Dexcom ONE+ and GlucoRx AiDEX are available on prescription based on the criteria in the blue box for patients living in Kent and Medway. GlucoMen Day is only available for existing patients and the company no longer supports new patients being started on their device. As of January 2025: *FreeStyle Libre 3 whilst available on FP10 prescription is **NOT** recommended for prescribing in primary care as its use is restricted to those patients on hybrid closed loop technology.*

Who can initiate continuous glucose monitoring?

In line with NICE guidance, in Kent and Medway, CGM should be initiated by a healthcare professional with expertise in its use, as part of supporting patients to self-manage their diabetes. CGM devices have been added on formulary in Kent and Medway as "specialist initiation" in line with the criteria on page 2. In this case "specialists" can be **secondary care, community, or primary care healthcare professionals who have undertaken appropriate training and can make shared decisions with patients**. The appropriate specialist must be able to assess suitability of the CGM device for the individual's clinical need, have experience and expertise in CGM use, be competent in initiating (including training on the use of the device) and provide ongoing support and monitoring. See competency and training information below. For patients (both adults and children) living with type 1 diabetes it is expected that this will usually be a by a healthcare professional within a specialist team at a hospital trust. For children with type 2 diabetes similarly it would be expected that this would be initiated by a specialist within a hospital trust team.

A patient says that their sensor or transmitter is faulty or has fallen off - what should I do?

For FreeStyle Libre 2 and 2 plus, do not prescribe to replace faulty sensors and transmitters. The patient should be advised to contact the manufacturer for a replacement. This is due to the warranty of the items. Information on this is in the table above For Dexcom ONE and GlucoRx AiDEX see above. Advice on suitable application and wear must be provided to the patient in line with manufacturer guidance. Extra sensors should not be prescribed and in the interim capillary glucose monitoring should be used. Further information on ordering replacements is available in the section "Key differences between the different CGM devices and key prescribing information". All healthcare professionals should also be aware of MHRA advice on reporting suspected adverse incidents and safety concerns to the MHRA's Yellow card scheme.

Who should supply the first prescription and organise training?

This is the responsibility of the healthcare professional recommending/initiating the device. The manufacturers often offer the first sensor and pack free of charge to clinics and GP practices – please see contact information below. There is therefore not usually a need to prescribe the first supply if supplied from a clinic.

Can drivers use the (isCGM) or rtCGM to monitor blood glucose levels prior to driving?

See here: https://www.gov.uk/guidance/diabetes-mellitus-assessing-fitness-to-drive for latest information from the Driver and Vehicle Licensing Agency (DVLA)

isCGM and rtCGM interstitial fluid glucose monitoring systems are **not** permitted for the purposes of Group 2 driving and licensing. Group 2 drivers who use these devices must continue to monitor "finger prick" capillary blood glucose levels in line with the guidance from the DVLA.

What about blood glucose test strips and lancets?

Primary care clinicians will still need to prescribe blood glucose test strips and lancets on FP10 prescription. This is to ensure that patients can test when the CGM device is showing an unexpected reading, machine failure or signal loss or for group 2 drivers as per DVLA guidelines. Patients will still need to be prescribed blood glucose testing strips, even though it is anticipated that their use, and therefore quantities required, would be significantly reduced. Blood glucose test strips should be used when symptoms do not match the readings and/or alarms. Similarly, there should be fewer quantities of lancets prescribed.

Blood glucose test strips will also be needed for any calibration and dosing needs depending on the meter being given. Patients should be reviewed to change them to formulary blood glucose meters, if not using one already. Primary care (GP practices and community pharmacies) should check with the individual if additional test strips and lancets are required at the time of dispensing and raise any concerns with over or under use/prescribing with the GP practice.

A patient with type 2 diabetes is requesting a CGM device but does not meet NICE criteria - can I still initiate and offer CGM?

Patients not meeting any of the criteria still wishing to use these devices maintain the option to purchase these devices at their own expense. Any patients currently being prescribed CGM outside of this document must be reviewed with a view to stop the CGM device. ***What about where a patient has been given a free sensor/self-funding and is requesting on-going prescribing?*** Patients not meeting the NICE criteria should not be prescribed CGM sensors at the cost of the NHS and should continue to self-fund. See the blue box as well in point 5.

Key contacts *(in no particular order)*

- **Dexcom ONE and Dexcom ONE+**: 0800 031 5763 or https://www.dexcom.com/en-gb/contact-us-direct
- **FreeStyle Libre 2 or 2 Plus (**Abbott): Abbott Customer Careline 0800 170 1177
  GlucoMen Day: 0800 085 2204 https://glucomenday.com/newplatform/en/glucomen-day-support/ *for existing patients only*
- **GlucoRx AiDEX**: 0800 007 5892 or info@glucorx.co.uk

I am a healthcare professional who wants to access training for these devices - where can I access this?

Resources to training have been listed below. Please note that registration will be required to access this training.

- Effective Diabetes Education Now (EDEN)
- Association of British Clinical Diabetologists (under resources)
- PITStop (where commissioned locally)
- How to initiate and support continuous glucose monitoring: DPC_24-5_139-141.pdf (diabetesonthenet.com)
- Training is also available for those devices that can be prescribed on FP10 by the manufacturers:
  FreeStyle Libre
  Dexcom ONE and One plus
  GlucoRX Aidex

What training and competencies should a healthcare professional have on the prescribing of these devices?

As a guide, please see appendix 1. As well as previous FAQ question.

How should I advise patients to remove their devices?

It is recommended that the manufacturers' advice is followed in the removal of these devices:

- https://www.dexcom.com/en-GB/faqs/how-do-i-properly-remove-sensor-adhesive
- https://www.freestyle.abbott/content/dam/adc/freestyle/uk/documents/legacy/Adhesion_Guide_(Page_4).pdf and https://www.freestyle.abbott/uk-en/support/faq.html
- https://www.glucorx.co.uk/aidex-instructions/

Where an adhesive remover is required to be used with these devices this should be purchased over the counter.

Also see the MHRA advice on the use barrier methods which may affect device performance for FreeStyle Libre: https://www.gov.uk/government/news/alert-to-users-of-freestyle-libre-flash-glucose-monitoring-system-regarding-skin-reactions-to-sensor-adhesive

References and acknowledgements

Parts of this document are adapted from NHS BOB – "Guidance for the Prescribing of Continuous Glucose Monitors (CGM) for Adults with Diabetes in Primary Care" and NHS South East London document "South East London Continuous Glucose Monitoring in Type 1 diabetes (adults) - Community Pharmacy Information Sheet" NICE NG17: type 1 diabetes in adults: https://www.nice.org.uk/guidance/ng17/chapter/Recommendations#blood-glucose-management-

NICE NG 28: type 2 diabetes in adults: https://www.nice.org.uk/guidance/ng28/chapter/Recommendations

How to Initiate and support continuous glucose monitoring - N Milne Diabetes & Primary Care Vol 24 No 5 2022: https://diabetesonthenet.com/wp-content/uploads/DPC_24-5_139-141.pdf Last accessed 19/06/23

Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets: NHS England 2023 https://www.england.nhs.uk/publication/commissioning-recommendations-blood-glucose-and-ketone-meters-testing-strips-and-lancets/

Driver and Vehicle Licensing Agency (DVLA): https://www.gov.uk/guidance/diabetes-mellitus-assessing-fitness-to-drive last updated 22nd June 2022. Last accessed 19/06/23

Appendix 1:
Initiation and monitoring of continuous glucose monitors – steps to help healthcare professionals
(adapted from "How to initiate and support continuous glucose monitoring" by Nicola Milne Diabetes & Primary care Vol 24 No 5 2022)

Initiating clinicians should be able to:

- Share decision making to identify the most appropriate device with the person living with diabetes (consider the person's preference, benefits/drawbacks of alerts and alarms, ability to share data with family and carers, potential issues with scanning/dexterity, and cost).
- Download the device's compatible mobile app for use with a smart device, prior to fitting. If a smart device is not available, arrange for a compatible reader before fitting. See manufacturers' specific guidance on how to apply the sensor and, for rtCGM, transmitter.
- Advise on warm-up time for the sensor (see table around device differences) and set low and high alarms (refer to individual device user guides) based on individualised target glycaemic range.
- Signpost the user and/or their family and carers to appropriate education to enable self-management (see links in FAQ).
- Provide information on future need for capillary glucose testing, driving (e.g. Group 2 drivers), etc. (see in FAQ).
- Consider linking to the device's cloud-based system (depending on local data-sharing guidelines) so that data can be shared from the person's own account to the healthcare professional's clinic account, to allow for remote review/consultations.
- Ensure the person understands when the data will be reviewed, and that CGM does not mean a professional will be viewing/monitoring their data continuously outside of consultations and will only take place usually at review within clinic.
- Arrange for timely review/follow-up.
- Provide information on disposal and sharps box.
- Advise on when blood glucose monitoring should continue.
- Advise who to contact if there is a faulty sensor.

At review:

- Interpret the data provided (e.g. time in range) being able to discuss areas such as limited data, inappropriate alarm settings, timing of insulin doses, incorrect insulin administration, under or overreacting to glucose levels, hypos, dietary changes.
- Assess machine suitability and overcome any questions patients may have (see link in FAQ).
- Review BGM.
- Provide educational support where needed.