NHS England London

A pan-London implementation document for continuous glucose sensors for adults with type 1 diabetes: device list

Version 6.1

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This document will be reviewed and re-released to reflect new and emerging evidence as appropriate. Please email england.londoncagsupport@nhs.net to request the most recent version.

This London guide is designed to complement and not replace local guidance and professional judgement. It will be updated to align with other national and regional guidance once published.

A pan-London implementation of continuous glucose sensors for adults with type 1 diabetes

Device List:

Please note the following when using this document:

- This document is intended to accompany the document 'A pan-London implementation of continuous glucose sensors for adults with type 1 diabetes'. It is not a standalone document.

- Devices are listed/grouped according to common features. This does not imply clinical suitability and does not remove the need for shared decision making about a continuous glucose monitoring (CGM) device that will suit an individual's needs and preferences.

- Please also note that these lists do not constitute a complete list of features for every device.

- The list will only be updated quarterly – therefore the list of devices may not be exhaustive at the time of use, and device features may change. We are satisfied the list of available devices and stated features is accurate and complete as of August 2023.

- Annual cost estimates have not been included for devices that are only available via NHS Supply Chain.

- Annual costs are **estimates only** and are based on the following sources and assumptions:

1. National Drug Tariff March August 2023 (NHS National Electronic Drug Tariff)
2. Use of number of sensors per annum (p.a.) as per NICE NG17 costing template assumptions

- Everyone with type 1 diabetes will require ongoing FP10 prescriptions for capillary blood glucose testing (lancets and strips). This is to ensure a safe mechanism of glucose testing should the CGM device or reader fail/be damaged/lost and to facilitate glucose testing when use of the CGM is not appropriate. Ongoing capillary blood glucose testing has been incorporated into the cost assumptions for CGM FP10 prescriptions.

- Some CGM devices also require additional adjunctive blood glucose testing or testing for calibration, or to confirm hypoglycaemia. These devices are clearly labelled as requiring capillary blood glucose testing in the lists below.

- In additional, for individuals with diabetes that drive group 1 vehicles (motorbikes, cars and light vehicles), DVLA rules state that those with interstitial glucose monitoring systems (rtCGM or isCGM) may need to carry out capillary blood glucose testing in certain circumstances[1]. Individuals with type 1 diabetes who drive group 2 vehicles cannot rely on interstitial glucose testing before or whilst driving and will therefore require ongoing regular FP10 prescriptions for capillary blood glucose testing (lancets and strips).

- Given the above, **we have therefore assumed that everyone with type 1 diabetes using a CGM device will also require an FP10 prescription of a minimum 200 test strips and lancets per annum for capillary blood glucose testing**. Some individuals may require more than this, particularly if their device requires adjunctive capillary blood glucose testing for calibration or confirmation or to confirm hypoglycaemia.

- We have assumed the minimum annual cost of capillary blood glucose monitoring is £52.00 p.a – this is based on using 200 test strips and 200 lancets per annum, with one test strip and one lancet at a unit cost of £0.26 per day; the cost assumptions used by NICE when developing NG17 [2].

[1] DVLA. Assessing fitness to drive: a guide for medical professionals. May 2022. Assessing fitness to drive: a guide for medical professionals - GOV.UK (www.gov.uk)
[2] NICE. NG17 resource impact template (type 1 and type 2 diabetes and continuous glucose monitoring). March 2022. Tools and resources | Type 2 diabetes in adults: management | Guidance | NICE

LIST 1:

- **Specialist rtCGM**
- **Not available on FP10 – supply chain only.**
- **Speciality features appropriate for specific clinical conditions or compatibility with certain CSII devices**
- **No costings supplied for this list as supply chain costs will vary locally**

Device Name:	**Key features of device:**	**CSII/Closed loop compatibility:**	**CBG testing required?**
Abbott Freestyle Libre 3	14-day sensor. Optional low and high glucose alerts. Data sharing with Data sharing with HCP's (healthcare professionals), relatives/carers via LibreLinkUp. Smartphone access only – no alternative data reader.	Yes, compatible with mylife CamAPS FX app and mylife YpsoPump insulin pump.	CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.
DEXCOM G6	10-day sensor and 3-month transmitter. Fixed urgent low glucose alert (cannot be silenced). Predictive low glucose alert (optional). Data sharing with HCP's and relatives/carers. Optional reader device if no smartphone access.	Yes, compatible with Tandem t-slim X2, Omnipod 5 and CamAPS/YpsoPump systems	CBG testing: Minimum 200 strips and lancets per annum - £52 p.a. .
DEXCOM G7	10-day sensor, integrated transmitter – no expiry. Urgent low glucose alert and predictive low glucose alert (both optional/can be silenced). Data sharing with HCP's and relatives/carers. Optional reader device if no smartphone access.	No current CSII compatibility	CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.

Medtronic Guardian 3	7-day sensor, 12-month rechargeable transmitter. Fixed urgent low glucose alert and optional predictive low glucose alert. Data sharing with HCP's only.	Compatible with with Medtronic 640G and 670G.	Yes – 2 calibrations per day, in addition to the basic 200 strips and lancets per annum. Total cost p. a £241.00
Medtronic Guardian 4	7-day sensor, 12-month rechargeable transmitter. Fixed urgent low glucose alert and optional predictive low glucose alert. Data sharing with HCP's, and with relatives/carers via CareLink connect smartphone app.	Compatible with Medtronic 780G	CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.
Medtrum TouchCare Nano	14-day sensor, Rechargeable transmitter. Optional low glucose alerts. Data sharing with HCP's, and relatives/carers	Medtrum TouchCare® Nano Tubeless Insulin Pump	CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.

LIST 2:

- **FP10 rtCGM**
- **Available on FP10**
- **All have optional low and high glucose alerts**
- **No compatibility with CSII devices**
- **All devices have sharing capability for HCP's but not all offer sharing with relatives/carers**

Device Name:	**Key features of device:**	**Additional CBG testing required?**	**Estimated annual cost per individual[3]:**
GlucoRX Aidex	14-day sensor, 4-year transmitter Data sharing with HCP's and relatives/carers.	Yes, for all treatment decisions	£778.74 (sensors)[4] CBG testing: £624 p.a.[5] – minimum 200 test strips and 200 lancets per month
DEXCOM ONE	10-day sensor, 90-day transmitter Optional reader device if no smartphone access Data sharing with HCP's only (via DEXCOM Clarity software).	No	£900 (sensors and transmitter)[6] CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.
Abbott Freestyle Libre 2 **(for those using device via a smartphone)** Updates to LibreLink App in July 2023 mean that users accessing blood glucose readings via smartphone and the LibreLInk App will now receive continuous glucose readings with no sensor scanning required; therefore, this device has been reclassified as rtCGM for smartphone users	14-day sensor; no transmitter required Optional low and high glucose alerts Data sharing with healthcare team/relatives/carers via LibreLinkUp Optional reader device if no smartphone access		£910[7] (sensors) CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.

[3] Costs are correct as per National Drug Tariff August 2023 NHS National Drug Tariff August 2023
[4] £29.76 per 14-day sensor – 26 sensors per annum. £19.95 per 4-year transmitter - assume £4.98 p.a.
[5] Based on use of 4 test strips and lancets per day at a cost of £0.26 per unit.
[6] £23 per 10-day sensor (36 sensors per annum); £18 per 3-month transmitter (4 transmitters per annum)
[7] £35.00 per 14-day sensor – 26 sensors per annum. No transmitter.

LIST 3:

- **isCGM**
- **Available on FP10**
- **No compatibility with CSII devices**

Device Name:	**Key features of device:**	**Additional CBG testing required?**	**Estimated annual cost per individual[8]:**
Abbott Freestyle Libre 2 **For those using device via a Freestyle Libre 2 Reader device (non-smartphone users)**	14-day sensor, no transmitter required Sensor must be scanned using Reader device to access blood glucose readings Optional low and high glucose alerts Data sharing with healthcare team, friends/relatives/carers via LibreLinkUp Optional reader device if no smartphone access	No	£910[9] (sensors) CBG testing: Minimum 200 strips and lancets per annum - £52 p.a.

[8] Costs are correct as per National Drug Tariff August 2023 NHS National Drug Tariff August 2023
[9] £35.00 per 14-day sensor – 26 sensors per annum. No transmitter.