

Diabetes blood glucose and ketone meters, testing strips and lancets position statement

Summary

NHS South West London recommends the supply of blood glucose and ketone meters, and the prescribing of blood glucose testing strips (BGTS) and lancets in line with NHSE guidance, with the addition of Accu-Chek Instant meter and required strips and lancets at the request of local paediatric teams.

Rationale

The intent of the national assessment process (concluded in February 2023) was to support the delivery of the NHS Long-Term Plan for diabetes management through the following key objectives:

- **Equitable access** to the same products for all eligible people, no matter where they live
- **Minimum quality standards** established fairly and transparently to better address the needs of all people living with diabetes.
- Prescribing practices aligned across primary and secondary care; and
- **Making best use of NHS resources**, whilst ensuring that the price paid is commensurate to the quality offered.

The NHSE recommended meters, strips and lancets have passed a rigorous evaluation process ensuring that the highest quality and cost-effective devices are approved.

South West London ICB has developed a preferred list to be used across south west london based on the NHSE list. The preferred meter choices are expected to be suitable for most patients, however it is recognised that some patients may have individual needs and may require an alternative choice. If an alternative meter, test strip or lancet is needed, a non-preferred meter may be used however this should still be in line with the NHSE recommended list.

The Accu-Chek Instant meter has been added to local recommendations in addition to the NHSE list because:

- it has received positive feedback
- is preferred by local paediatric teams who have experience in using this meter
- the cost of the strips and lancets are in line with other recommended products

Please note: if ketone monitoring is required, a meter that uses ketone strips listed in this statement must be chosen.

Guidance for clinicians

- It is important to establish if patients with Type 2 Diabetes (T2DM) need to self-monitor their blood glucose levels in line with NICE guideline NG28. Only provide the patient with a meter if there is a clear goal and purpose for testing. See recommendations that relate to self-monitoring by capillary blood glucose monitoring (1.6.12 to 1.6.16) or please see the section below for guidance on eligibility based on treatment type or flow chart 1. You can also refer to the SWL T2DM guidelines if you require any further information. If self-monitoring is required then training on the correct use, storage and interpretation of readings should be provided.
- T2DM patients that are prescribed metformin/gliptins/sodium-glucose cotransporter-2 inhibitors (SGLT2i) only or in combination are generally advised not to use blood glucose strips for self-monitoring unless short term use is advised by a specialist (e.g. if starting oral or intravenous corticosteroids).
- For patients with type 1 diabetes mellitus (T1DM), continuous glucose monitoring (CGM) should be offered as best practice, as per NICE <u>NG17</u> and <u>NG18</u>. However, patients who are using CGM will still need to take capillary blood glucose measurements (although they can do this less often). For further information regarding the prescribing of additional BGTS and lancets for CGM patients, please refer to our <u>CGM Policy</u> in NHS South West London.
- Patients co-prescribed Freestyle Libre require a supply of BGTS for backup in case
 of device failure, to confirm hypoglycaemia, and when continuous glucose
 monitoring (CGM) is inappropriate. A minimum supply should be added to the
 patient's medication list on variable use repeat, with no more than four boxes
 per year, unless there are exceptional circumstances like meeting DVLA
 requirements. For more details, refer to the SWL CGM policy.
- Quantities of BGTS and lancets should follow SWL recommended quantities (see section below or summary tables 2 and 3). These are based on testing frequency and cannot be split (packs of 50 for strips, 100 for lancets). For most CGM users, only 1 pack per quarter is recommended. Prescribe low-cost lancets where possible (less than £2.50/100).
- Where people with diabetes are already using blood glucose or ketone meters that
 are not on the recommended list of products, review if ongoing self-monitoring of
 blood glucose is required. Where this is required, patients should be offered an
 alternative meter (these can be found in the section below or in summary table 1)
 at the earliest opportunity following a discussion with their healthcare professional.
- For those that have stock of non-preferred meters, these should be removed and not supplied to patients, as these will require non-preferred BGTS and lancets.
- Many of the meter suppliers offer recycling schemes for unused meters, please contact the suppliers directly for further details of recycling schemes.
- All suppliers will provide, free of charge, the recommended meters, lancing devices, and ongoing control solutions to all healthcare settings across England in primary care, secondary care and to service users.
- All recommended suppliers will provide free technical support by a freephone telephone number, support material and meter training for both service users and healthcare professionals.

- Please refer to <u>NHSE guidance</u> for a list of contact information of the suppliers for the recommended NHSE products.
- Contact information for the Accu-Chek Instant meter:
 - Ordering meters via phone number 0800 0407 221 (option 2) or via email burgesshill.dcaccountmanagers@roche.com

Preferred blood glucose and ketone meters, testing strips and lancets

When deciding on a suitable meter with your patient, based on their needs and the functionality required, please refer to the key features for each meter in the NHSE guidance. These include connectivity, warnings, alerts, display, size and recommended cohorts for each meter. If multiple meters are considered appropriate for an individual patient, choose the option that uses BGTS with the lowest acquisition cost.

Additional functionality is recommended for the following cohorts:

- Carbohydrate Counting
- Cognitive Impairment
- Dexterity Issues
- Gestational diabetes
- Group 2 Driver
- Learning Difficulties
- No Fixed Abode
- Paediatrics
- Unable to read English
- Visually Impaired

Examples of additional functionality features include (Note: this is not an exhaustive list):

- On-board carbohydrate counting calculator
- Alarms
- Auto strip ejector
- Extra-large memory
- Multiple language option
- Audible instructions assist
- Large backlit screen display

Please note there are specific meters recommended for patients with gestational diabetes, and paediatric patients, please refer to section below or summary table 1 for these recommendations.

Summary of preferred blood glucose and ketone meters, testing strips and lancets

The list is sorted from low to high BGTS cost. If multiple meters are considered appropriate for an individual patient, choose the option that uses BGTS with the lowest acquisition cost.

Non-ketosis prone T2DM: Suitable for the majority of patients

Meter: Agile® (Agamatrix)

• **BGTS:** AgaMatrix Agile[®] (£5.43 per 50)

• Lancet: Comfort Twist® OR AgaMatrix® Ultra-thin

Meter: GlucoFix Tech® GK (A. Menarini Diagnostics)

• **BGTS**: GlucoFix Tech® Sensors (£5.95)

Lancet: Glucoject Plus[®]

Non-ketosis prone T2DM: Suitable for patients that require additional functionality (excluding paediatric and gestational diabetes - GDm-Health)

Meter: Agile® (Agamatrix)

• **BGTS:** AgaMatrix Agile® (£5.43 per 50)

• Lancet: Comfort Twist® OR AgaMatrix® Ultra-thin

Meter: GlucoRx Smart® (GlucoRx)

• **BGTS:** GlucoRx Smart test strips[®] (£5.45 per 50)

• Lancet: GlucoRx® OR GlucoRx® Safety

Paediatric patients with T2DM that require additional functionality

Meter: GlucoRx Smart® (GlucoRx)

• **BGTS:** GlucoRx Smart test strips [®] (£5.45 per 50)

• Lancet: GlucoRx® OR GlucoRx® Safety

Gestational diabetes (GDm-Health) patients that require additional functionality

Meter: WaveSense JAZZ® WIRELESS (AgaMatrix)

• **BGTS**: WaveSense JAZZ[®] (£8.74 per 50)

Lancet: Comfort Twist® OR AgaMatrix Ultra-thin®

Local SWL meter option preferred by local SWL Paediatric team if appropriate

Meter: Accu-Chek Instant® (Roche)

• **BGTS**: Instant[®] (£5.95 per 50)

• Lancet: FastClix®

T1DM or ketosis prone T2DM: Suitable for the majority of patients who also require a ketone testing meter

Meter: GlucoFix Tech® GK (A. Menarini Diagnostics)

• **BGTS**: GlucoFix Tech® Sensors (£5.95 per 50)

• Ketone Test Strip: GlucoFix Tech® BKetone Sensors

Lancet: Glucoject Plus[®]

Meter: 4SURE® Smart Duo (Nipro Diagnostics)

• **BGTS**: 4SURE® (£8.99 per 50)

• Ketone Test Strip: B 4SURE® beta-ketone

Lancet: 4SURE®

Meter: ALLYbgk® (AgaMatrix)

BGTS: ALLYbgk® (£5.43 per 50)
 Ketone Test Strip: ALLYbgk®

Lancet: ALLY®

T1DM or ketosis prone T2DM: Suitable for the majority of patients that require additional functionality

Meter: GlucoFix Tech® GK (A. Menarini Diagnostics)

• **BGTS**: GlucoFix Tech® Sensors (£5.95 per 50)

• Ketone Test Strip: GlucoFix Tech® BKetone Sensors

• Lancet: Glucoject Plus®

Recommended quantities of BGTS (blood glucose testing strips)

Note: Packs contain 50 strips and cannot be split.

- 1 test per day: 28 tests per 28 days, approximately 0.5 packs per month, 8 packs per year.
- 2 tests per day: 56 tests per 28 days, 1 pack per month, 14 packs per year.
- 4 tests per day: 112 tests per 28 days, 2 to 3 packs per month, 29 packs per year.
- 6 tests per day: 168 tests per 28 days, 3 to 4 packs per month, 44 packs per year.
- 8 tests per day: 224 tests per 28 days, 4 to 5 packs per month, 58 packs per year.

For CGM (continuous glucose monitoring) users: average 1 pack of 50 strips per quarter (4 per year).

Recommended quantities of lancets

Note: Packs contain 100 lancets and cannot be split.

- 1 test per day: 28 tests per 28 days, 4 packs per year.
- 2 tests per day: 56 tests per 28 days, 8 packs per year.
- 4 tests per day: 112 tests per 28 days, 15 packs per year.
- 6 tests per day: 168 tests per 28 days, 22 packs per year.
- 8 tests per day: 224 tests per 28 days, 30 packs per year.

For CGM users: average 1 pack of 200 per year.

Lancets should be low-cost (less than £2.50 per 100) where clinically appropriate.

Reviewing the ongoing need for self-monitoring of blood glucose (SMBG)

As part of reviews, the need for continued SMBG should be assessed as below (also summarised in Flowchart 1):

- Patients with diet and lifestyle-controlled diabetes or those controlled with metformin and/or gliptin (DPP4 inhibitor), gliflozin (SGLT2 inhibitor), GLP-1 agonist, and/or pioglitazone or those who are newly diagnosed.
 - These patients will not routinely require SMBG. If there are exceptional circumstances, SMBG may be provided for an initial period of 4 weeks, then reviewed.

- Patients at significant risk of hypoglycaemia (Patient treatment regime includes sulfonylurea/glinide treatment) or during short periods of illness or medication changes, or for car drivers where relevant.
 - SMBG is recommended.
- Patients on insulin therapy either alone or in combination therapy.
 - o SMBG recommended in all patients.
- Pregnant patients with type 2 diabetes or those who develop gestational diabetes (GDM).
 - o SMBG recommended in all patients.

Where SMBG is recommended please offer an appropriate meter and test strips as per the section on preferred meters above or summary table 1.

Table 1: Summary of preferred blood glucose and ketone meters, testing strips and lancets

Meter	BGTS	*BGTS Cost/50	Lance	et	Supplier			
Suitable for the majority of patients with T2DM (Non-ketosis prone)								
Agile [®]	AgaMatrix Agile [®]	£5.43	Comfort Twist [®] OR AgaMa	ıtrix [®] Ultra-thin	AgaMatrix			
GlucoFix Tech GK [®]	GlucoFix Tech [®] Sensors	£5.95	Glucoject Plus [®]		A. Menarini			
T2DM patients that require additional functionality								
Non-ketosis prone T2DM (Excluding Paediatric and Gestational diabetes [GDm-Health])								
Agile [®]	AgaMatrix Agile [®]	£5.43	Comfort Twist [®] OR AgaMa	ıtrix [®] Ultra-thin	AgaMatrix			
GlucoRx Smart [®]	GlucoRx Smart [®]	£5.45	GlucoRx [®] OR GlucoRx [®] S	Safety	GlucoRx			
Paediatric patients with T2DM								
GlucoRx Smart [®]	GlucoRx Smart [®]	£5.45	GlucoRx [®] OR GlucoRx [®] S	Safety	GlucoRx			
Gestational diabetes (GDm-Health) patients								
WaveSense JAZZ [®] WIRELESS	WaveSense JAZZ [®]	£8.74	Comfort Twist [®] OR AgaMatrix [®] Ultra-thin		AgaMatrix			
Local SWL meter option preferred by local SWL Paediatric team if appropriate								
Accu-Chek Instant [®]	Instant [®]	£5.95	FastClix [®]		Roche			
Meter	BGTS	*BGTS Cost/50	Ketone Test Strip	Lancet	Supplier			
T1DM or ketosis prone T2DM								
	Majority of	patients wh	no also require a ketone tes	ting meter				
ALLYbgk [®]	ALLYbgk [®]	£5.43	ALLYbgk [®]	ALLY [®]	AgaMatrix			
GlucoFix Tech GK [®]	GlucoFix Tech Sensors [®]	£5.95	GlucoFix Tech [®] B- Ketone Sensors	Glucoject Plus [®]	A. Menarini			
4SURE [®] Smart Duo	4 SURE [®]	£8.99	B 4SURE [®] beta- ketone	4SURE [®]	Nipro			
Majority of patients that require additional functionality								
GlucoFix Tech GK [®]	GlucoFix Tech [®] Sensors	£5.95	GlucoFix Tech [®] BKetone Sensors	Glucoject [®] Plus [®]	A. Menarini			

^{*}cost <u>eDrug tariff</u> September 2025. Note: Sorted from low to high BGTS cost. If multiple meters are considered appropriate for an individual patient, choose the option that uses BGTS with the lowest acquisition cost.

Table 2: Recommended quantities of BGTS

(Packs contain 50 strips and cannot be split)

Tests per day	Tests per 28 days	Packs per month	Packs per year
1	28	~0.5	8
2	56	1	14
4	112	2 to 3	29
6	168	3 to 4	44
8	224	4 to 5	58

^{*}For CGM users: average 1 pack of 50 per quarter (4/year)

Table 3 Recommended quantities of lancets

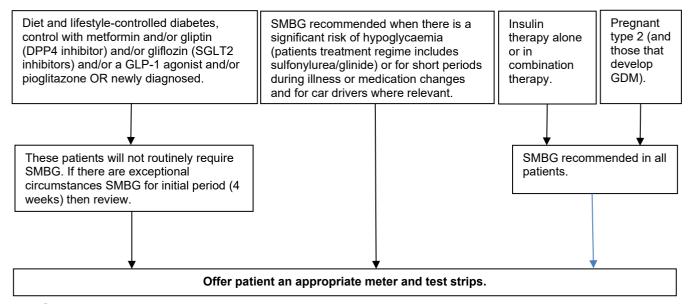
(Packs contain 100 lancets and cannot be split)

Tests per day	Tests per 28 days	Packs per year			
1	28	4			
2	56	8			
4	112	15			
6	168	22			
8	224	30			

^{*}For CGM users: average 1 pack of 200 per year

Flowchart 1. To support review of ongoing need for self-monitoring of blood glucose (SMBG)

As part of reviews, the need for continued SMBG should be assessed using the following algorithm:



References

• NHS England. <u>'Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets'</u> October 2023

Document History

Version: V 1.0

Author: SWL Medicines Optimisation Diabetes Network

Approved by: SWL Integrated Medicines Optimisation Committee (IMOC)

Approval date: **September 2025**Review Date: **September 2026 Version: V 1.1 (November 2023)**

Updates following publication of updated NHS England. <u>'Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets</u>' in October 2023:

 Removal of the AgaMatrix Agile and On Call Extra Mobile for first line treatment of gestational diabetes requiring a GDm-Health™ application due to technical issues with the software

^{*}Lancets should be low-cost (<£2.50/100) where clinically appropriate

 Typo correction, On Call Extra has been recommended for paediatrics, not On Call Extra Mobile

Version: V 1.2 (December 2023)

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Version: V 1.3 (September 2025)

- Added detailed guidance for clinicians regarding self-monitoring of blood glucose (SMBG) in Type 1 and Type 2 diabetes, including CGM users, Freestyle Libre backup supplies, and assessment of ongoing SMBG needs.
- Updated tables of preferred meters, testing strips, pricing and lancets, sorted by BGTS cost, including specific cohorts requiring additional functionality.
- Standardised recommended quantities of BGTS and lancets for all patients, including CGM users, based on testing frequency.
- Flowchart for review of ongoing SMBG needs included to support clinical decision-making.
- Formatting for accessibility

Version: V 1.4 (October 2025)

Formatted for accessibility.