

Blood Glucose Monitoring Guidance - Type 2 Diabetes in Adults

Information on Self-Monitoring of Blood Glucose (SMBG)

- The level of SMBG will vary according to the treatment regime and target level of control set for the patient.
- At treatment initiation, or when treatment is altered, the frequency may need to be increased.
- Patients should be taught how to INTERPRET and ACTION results.
- Patient education is vital - SMBG is only as good as the way it is used.

Frequency of Self-Monitoring

Type 2 diabetes treatment	Suggested SMBG frequency	Boxes to prescribe each month *Check notes on additional SMBG
<ul style="list-style-type: none"> • Diet and exercise alone • Metformin • Pioglitazone • DPP-4 inhibitor • GLP-1 mimetic • SGLT2 inhibitor 	Not routinely recommended (unless patient is also using a sulfonylurea or insulin). HbA1c testing should be adequate once or twice per year (depending on level & target).	NONE Please see comments on additional circumstances below.
<ul style="list-style-type: none"> • Sulfonylureas (e.g. gliclazide) • Rapid acting insulin secretagogue ('glinides') (e.g. nateglinide) 	Initially: At least twice daily Maintenance: Three times per week (non-drivers) Twice daily (drivers) at times relevant to driving to enable the detection of hypoglycaemia	<ul style="list-style-type: none"> • One box (50 strips) in first month, then • One box (50 strips) every 4 months (maintenance) non drivers or one box monthly (50 strips) drivers
<ul style="list-style-type: none"> • Insulin <i>Once daily</i> 	1 to 2 times per day	One box (50 strips)
<ul style="list-style-type: none"> • Insulin <i>Twice daily</i> 	2 to 3 times per day	Two boxes (100 strips)
<ul style="list-style-type: none"> • Insulin <i>Basal bolus</i> 	4 times per day	Three boxes (150 strips)

NICE also suggests self-monitoring of plasma glucose can be offered to a person newly diagnosed with type 2 diabetes but only as an integral part of his or her self-management education. Please ensure it is reviewed and withdrawn if the patient doesn't meet the above criteria.

Circumstances in which additional Self-Monitoring is required

- **Driving (see below)**
- Lifestyle changes
- Concurrent illness
- Periods of fasting
- Patients co-prescribed glucocorticoids
- Impaired awareness of hypoglycaemia
- Frequent hypoglycaemia
- Changes in treatment
- Pregnancy/pre-conception
- Patients with persistent hyperglycaemia

Driving and Diabetes

DVLA information on diabetes

<https://www.gov.uk/diabetes-driving>

Diabetes UK information on driving

<https://www.diabetes.org.uk/Guide-to-diabetes/life-with-diabetes/Driving/>

Patients with a car or motorbike licence who are prescribed insulin must notify the DVLA. Patients on insulin should check blood glucose 30 to 60 minutes before driving & every 2 hours whilst driving (so may need additional test strips).

Patients with a car or motorbike license on sulfonylureas/glinides may need to notify & test.



There are additional requirements for patients with a bus, coach or lorry licence.

Following the publication of the NHS England [Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets](#) (April 23). Patients should not be switched to or initiated with meters that are not included in the guidance.

A meter with test strips costing less than £6 for 50 strips from the list below should be used first line.

First choice of blood glucose monitoring equipment in primary care

No switching is required if a patient is already using another suitable meter with test strips costing less than £6 for 50.

Meter	Test strips	Test strip expiry	Features / Cohort appropriate for	Lancets	Patient support	Supply of meters to professionals
Contour Plus Blue Ascensia Diabetes Care 	Contour plus £5.95/50	24 months No change in expiry on opening	SmartCOLOUR™ target range indicator. Second chance testing can reapply blood to the same strip for up to 30 seconds. Contour Diabetes App can be set to different languages. Haematocrit range: 0-70%	Microlet £2.99/100	0800 170 1060 Or 0345 600 6030 diabetessupport@ascensia.com	07469 912558 murali.painter@ascensia.com
Agile AgaMatrix 	AgaMatrix Agile £5.99/50	6 months	Requires pairing with an App to save results. Clear bright screen. Haematocrit range: 20-60%	Comfort twist £2.69/100	0800 093 1812 customercare@agamatrix.co.uk	07825 913775 iovens@agamatrix.com

Prices accurate as of March 2024

Second choice of blood glucose monitoring equipment in primary care

If first choice meters are not appropriate for a patient, then a second-choice meter with test strips costing **less than £6 for 50** can be used from category 2 or 3 of the [NHS England Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets](#).

Gestational diabetes – secondary care will advise which meter to be used, the Wavesense Jazz range is used at the time of writing this guidance.

Ketosis prone type 2 diabetes patients will need a meter that also tests for ketones. Refer to the type 1 diabetes meter guideline or contact the diabetes specialist nurse team for advice.

Continuous Glucose Monitoring (CGM) is only funded for specific cohorts of type 2 diabetes patients. Refer to the [Clinical Pathway for the use of diabetes technologies in all patients with Type 2 Diabetes](#) for Eligibility criteria.

Lancets

BNSSG ICB recommends prescribing single use lancets that cost less than £3/100 and that current prescribing of single use lancets costing more than £3/100 should be reviewed and decribed where appropriate.

Safety lancets are considerably more expensive and should only be prescribed for patients who are having their blood glucose monitored by a healthcare professional/carer. The recommended brand of safety lancets is Neon Verifine (£2.99/100).

Good Practice Points

- The higher the gauge (G) of a lancet; the smaller the diameter of the needle. A low gauge needle (28G) may be quite uncomfortable for the patient while a higher gauge (33G) may not provide sufficient blood for testing.
- Lancets are for single use only, ensure patients are educated about safe disposal via sharps bin.

References and further guidance

NICE Clinical Guideline NG28 <http://www.nice.org.uk/guidance/NG28>

[NHS England Commissioning recommendations following the national assessment of blood glucose and ketone meters, testing strips and lancets](#) (April 2023)

NHS Business Services Authority. Drug Tariff March 2024 [Drug Tariff | NHSBSA](#)