

Who to test, when to test?

Self-monitoring of Blood Glucose (SMBG) Guidance for Healthcare Professionals

Principles

Patients should be given adequate training and education in self-monitoring techniques and they and their health professionals should be clear about what they hope to achieve by SMBG. Individuals should also be able to utilise their blood glucose results to adjust their lifestyle and if relevant, insulin doses accordingly.

Annual review is recommended to assess the continued benefit in addition to their monitoring frequency and ability to use/maintain the meter.

Recommendations

- There is evidence of benefit for SMBG in those with Type 1 and Type 2 diabetes on insulin but no robust evidence that SMBG has positive clinical outcomes for those with Type 2 diabetes on oral antidiabetic agents or diet for whom SMBG may have an adverse impact on quality of life.
- Patients who do not find testing helpful should not feel they have to either start or continue testing.
- In general, blood glucose concentrations fluctuate more widely in people with Type 1 diabetes than those with Type 2 diabetes.
- Children and adolescents may need to test more frequently due to growth and development.
- Women who are pregnant, who develop gestational diabetes or who are planning a pregnancy will need much more frequent and intensive testing. This should be discussed with a Diabetes Specialist Nurse or a doctor specialising in diabetes.

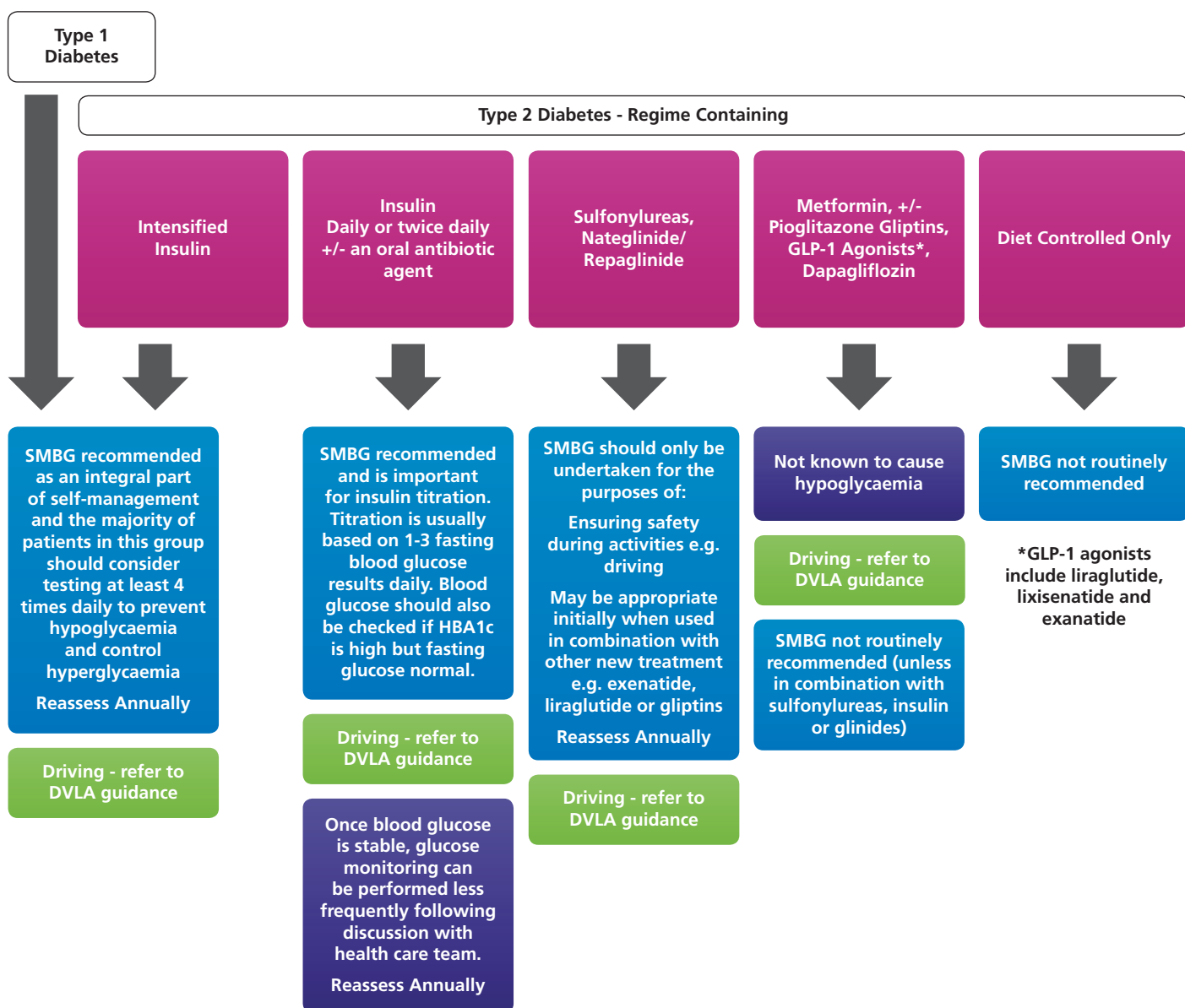
Driving

Patients with diabetes who drive and who are prescribed insulin, sulphonylureas or nataglinide/repaglinide) should ensure that they are not experiencing hypoglycaemia which would affect their ability to drive. Patients should be advised to check their blood glucose before setting out to drive, every two hours whilst travelling and at times relevant to driving. They should be advised if the blood glucose level is 5.0mmol/L or less, take a snack, and check blood glucose levels as above. If the blood glucose is less than 4.0mmol/L or they feel hypoglycaemic, do not drive. (Refer to full DVLA "At a glance" guide for all DVLA glucose monitoring requirements according to vehicle classification)

Further recommendations

- Urine testing is not recommended
- 3-6 monthly HbA1C should be sufficient indicator of control in those who are not blood glucose monitoring.
- If self blood glucose monitoring is indicated but patients are unable to perform it for whatever reason, alternative arrangements through carers or district nurses will be sought.





For patients with type 1 or type 2 diabetes SMBG may be recommended or frequency increased by a health professional during:

- Acute intercurrent illness (including corticosteroid usage)
- Therapy changes e.g. if oral hypoglycaemic agents are to be titrated up using fasting glucose
- In cases of recurrent hypoglycaemia or suspected asymptomatic hypoglycaemia.
- Lifestyle changes or diabetic women who are pregnant (see above) or planning pregnancy
- If the patient is undergoing intensive diabetes education, e.g. BITES, DAFNE, DESMOND.
- If the patient is embarking on insulin pump therapy.