**Self-monitoring of Blood Glucose Guidelines in type 1 and type 2 diabetes (SMBG)**

- **Patient education is vital when initiating SMBG**
- Teach patient how to interpret and action BG results
- Agree testing times and targets with the patient
- Carry out structured annual assessment to confirm continued benefit of SMBG
- Use just HbA1c testing, in those who will not benefit from SMBG

### Diet and Exercise
- **Metformin**
- Pioglitazone
- DPP-4i
- SGLT-2s
- GLP-1 mimetics
  - *Monotherapy or in combination with other drugs in this group*

  - Low risk of hypoglycaemia
  - Patients do not routinely need to test unless agreed purpose for testing
  - Advise patient to read DVLA advice

### Sulphonylureas
- Repaglinide / nataglinide
  - *Monotherapy or in combination with other drugs in this group*

  - Increased risk of hypoglycaemia
  - Usually test 2 to 3 times a week if stable
  - Drivers will need to test before driving (see DVLA advice)

### Insulin
- High risk of hypoglycaemia
- See table below for testing
- Drivers should test no more than 2 hours before driving, ideally just before driving, and every 2 hours when driving (see DVLA advice)

<table>
<thead>
<tr>
<th>Insulin regimen</th>
<th>Minimum recommended BG testing frequency</th>
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<tbody>
<tr>
<td>ONCE daily insulin with oral agents</td>
<td>≥ 1 test per day at different times of day</td>
</tr>
<tr>
<td>TWICE daily insulin</td>
<td>2 tests per day, before meals when insulin is due</td>
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<tr>
<td>BASAL BOLUS insulin &amp; carbohydrate counting</td>
<td>May need ≥ 4 tests per day</td>
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<tr>
<td>INSULIN PUMP</td>
<td>≥ 6 tests per day, up to 10 tests per day</td>
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<tr>
<td>Gestational diabetes (with or without insulin)</td>
<td>Without insulin: usually 6 tests / day, With insulin: up to 10 tests per day</td>
</tr>
</tbody>
</table>

### Consider stepping up SMBG when:
- Therapy or dosing is changed
- Control is deteriorating e.g. increased frequency of hypoglycaemia
- Planning or during pregnancy
- Breastfeeding
- Inter current illness (refer to local sick day rules if available)
- Ensuring safety during activity e.g. exercise or driving
- Systemic corticosteroids are co-prescribed

### Consider stepping down or stopping SMBG:
- When patients therapy is changed and does not cause hypoglycaemia
- If patient’s control is quite stable
- After pregnancy (if not breastfeeding)
- Once recovered from inter current illness (including on discharge from hospital)
- If SMBG has a negative effect on well being
- If no action is being taken on results

**Key questions to think about before continuing SMBG:**
1. Is SMBG appropriate for this patient?
2. What value does self-monitoring add to the patient’s care?
3. Is the patient’s blood glucose well controlled?

Notes: See individual CCG guidance for preferred local choice of blood glucose meter. Freestyle Libre advice here.

Agreed by Surrey PCN Feb 2018; review date Feb 2021