NON-INSULIN USING TYPE 2 DIABETES
Decision Tool for Self-Monitoring of Blood Glucose (SMBG)

Routine, ongoing testing is not necessary in most non-insulin managed type 2 diabetes. This decision tool will help to identify exceptions.

**Instructions:** Considering the individual, indicate with a Yes or No if the specific issue/consideration has an impact on the need for SMBG. The “prompting” considerations in italics should help in formulating your response.

- “Yes” in either of the pink areas is an indication for SMBG.
- “Yes” in all of the green areas, along with a Yes in the pink area, are required conditions before SMBG is recommended.
- “Yes” in the white area, in conjunction with Yes in all the green areas, may indicate the need for “low intensity” SMBG.

### SAFETY

#### Hyperglycemia:
Is there moderate to severe hyperglycemia (A1C ≥ 8.5% and/or before meal BG >10-12 mmol/L)?

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- Consider if treatment change; i.e., adding insulin or a secretagogue* is imminent.

#### Hypoglycemia:
Is there a risk of hypoglycemia?

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- Consider if the medication, in combination with extra activity, alcohol, or lifestyle choice, may increase risk of hypoglycemia.

### HEALTH CARE TEAM (HCT)

Will the HCT take appropriate/timely action (management change) based on SMBG results?

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- Consider if the HCT or provider will make a treatment change based on SMBG, or will the A1C be the telling factor.

### INDIVIDUAL’S KNOWLEDGE, SKILLS, AND WILLINGNESS

Is the individual willing and able to test and record SMBG results?

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- Consider age (> 75), frailty, finances, and/or cognition before recommending SMBG.

Is the individual willing and able to interpret and ACT on results?

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- Consider if this individual is able to ACT on the SMBG results with lifestyle changes (targeted exercise, further food restrictions, etc.).
- Consider if lifestyle changes related to food intake (diet) and/or exercise will really have an impact on the SMBG results.

### SELF-MANAGEMENT EDUCATION

Is education in SMBG essential at this point due to “safety” and/or other provider identified reasons?

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- Consider if it would be better at this time to focus on monitoring physical activity (steps or time spent being active), food choices/portion sizes, weight, etc.

### RECOMMENDATION (Based on shared decision-making by the individual with diabetes and the provider):

- No SMBG required at this time.
- Low intensity testing (time limited).
- High Intensity testing (time limited).

* Sulfonylureas: glyburide, gliclazide, glimepiride; meglitinides: nateglinide, repaglinide.

**Low Intensity Testing**

- Used to individual’s and/or provider’s understanding of effects of treatment.
- May assist clinicians in guiding therapeutic adjustments, providing more timely feedback regarding potential medication changes, and to identify postprandial hyperglycemia, if in question.¹

**Examples for use at diagnosis and ongoing follow-up (times can vary for 1 to 3 wks, depending on the purpose [prior to office visit, new dx]):**

- 3 tests/day for 2 days/wk—one weekday and one weekend day (fasting and ac/pc at the largest meal [often supper]) for 2-3 wks.
- 2 tests/day—varying times (ac breakfast/supper, ac lunch/bedtime; etc.) for 1 wk.
- 1 test/day at staggered times (ac breakfast, lunch, supper, or bedtime) for 1-2 wks (prior to office visit).
- 1 test/wk between office visits.

**High Intensity Testing**

- Used for “pattern analysis” to create BG profiles that can identify daily BG patterns that lead to action based on results.
- Should be used only for a specific time and for a specific purpose; e.g., change in treatment (adding insulin or changing time of insulin), acute illness (flu, GI upset, etc.) resulting in symptoms or added risk, etc.¹

**Examples:**

- Generally 5-7 tests/day for 1-3 days.
- Staggered testing, 2 x/day (ac and pc testing for alternating meals) x 1 wk, or over a 2-3 wk period.¹ Duration of testing depends on medication and degree of hyperglycemia (what change is expected over what period of time).
- Results should be reviewed by phone or during an office visit immediately after the testing period.

**NOTE:** Gestational diabetes or women with type 2 diabetes planning for pregnancy/or in the early stages of pregnancy will be required to test more routinely for extended periods of time.