

Type of Interaction

Patient asks about the HbA1C/glucose POCT

I am glad you want to know more about the HbA1C and/or glucose POCT. Do you currently have diabetes?

Screening¹

- Glucose is the main form of sugar found in your blood and is used as the body's main source of energy. People with diabetes have a difficult time regulating the levels of sugar in their blood.
- Screening for T2DM is very important. It is estimated that 1%-3% of the general population have undiagnosed T2DM. Early detection means management can be started sooner to prevent complications related to diabetes, such as kidney disease, heart disease, nerve damage, and vision problems.

Refer to box on Target Populations for more information on who should be screened for T2DM.

Diabetes Management^{2,3}

- An HbA1C test is used to estimate your average blood sugar levels over the previous 2-3 months.
- Blood glucose testing is important to determine instances of low or high blood glucose levels, which are indications of how well behavioural changes and/or diabetes medications are working.
- Measuring your HbA1C and blood glucose levels is important to see how well your diabetes treatment plan is working and to adjust therapy as needed.
- Low blood sugar levels can lead to symptoms such as trembling, sweating, difficulty concentrating, confusion and dizziness, so it is important to monitor your blood glucose levels to prevent or confirm if you are experiencing hypoglycemia and to treat it early.
- High blood sugar levels can be problematic since over time this can lead to issues such as kidney disease, heart disease, nerve damage, and vision problems if left unaddressed.

Refer to box on Target Populations for more information on who should receive testing.

Pharmacist screens for eligible patients

TARGET POPULATIONS

Screening for Type 2 Diabetes in Adults¹

Population	Testing Frequency
Individuals ≥40 years of age	HbA1C and/or FPG test at least every 3 years
Individuals at high risk of developing diabetes on a risk calculator (e.g., CANRISK) [^]	
Individuals with additional risk factors for diabetes (e.g., family history of diabetes, history of prediabetes or gestational diabetes, member of a high-risk population, overweight)	Screen earlier and/or more often (i.e., HbA1C and/or FPG every 6-12 months)
Individuals at very high risk of developing diabetes on a risk calculator (e.g., CANRISK) [^]	

[^] CANRISK should be used with caution for individuals <40 years of age as it has not been validated in this age group.

Management of Diabetic Patients

HbA1C Testing²

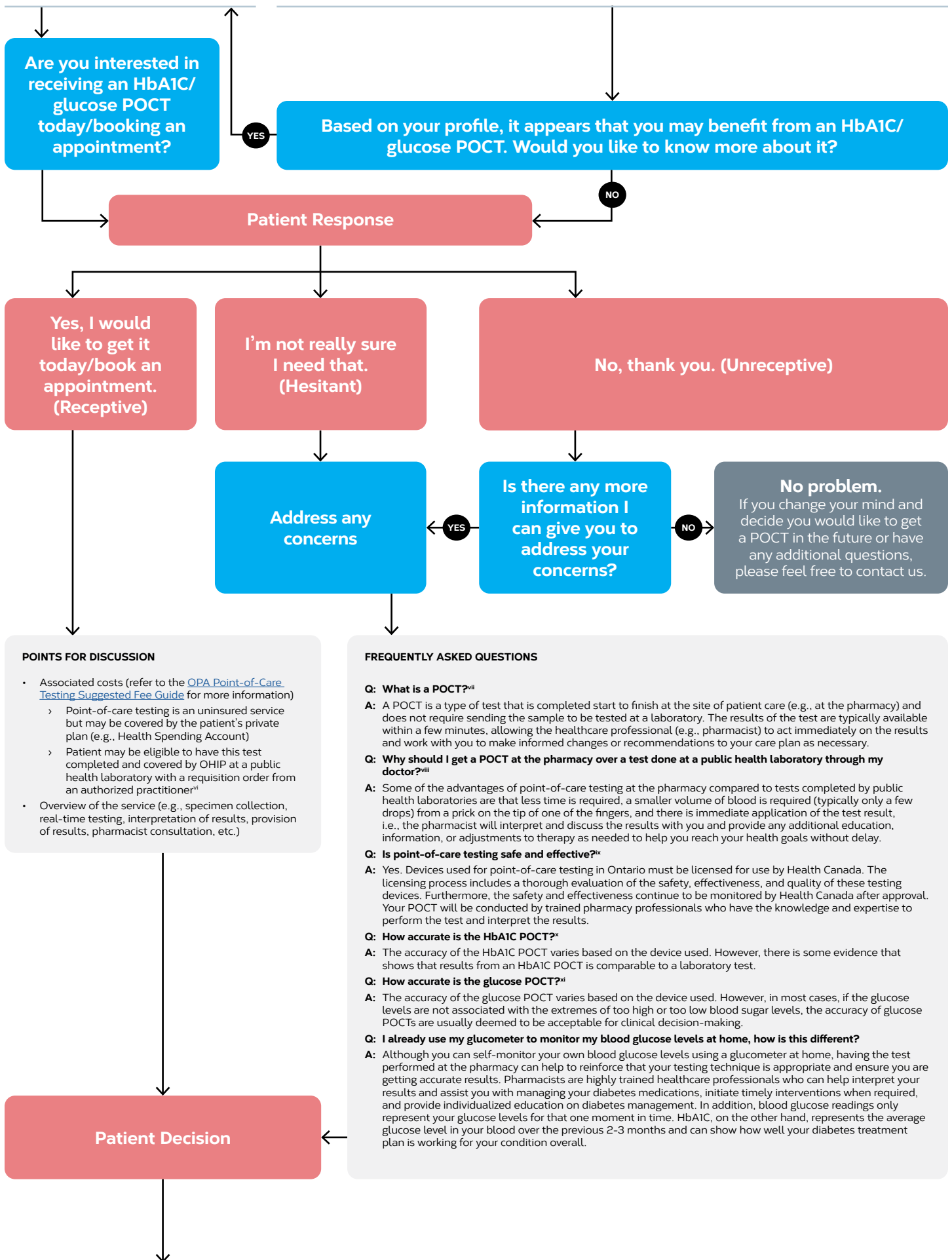
Population	Testing Frequency
Most individuals with diabetes	Approximately every 3 months
Adult patients on stable treatment who consistently achieve glycemic targets	Minimum of every 6 months
Special circumstances (e.g., significant changes to therapy, during pregnancy)	More frequent testing may be required

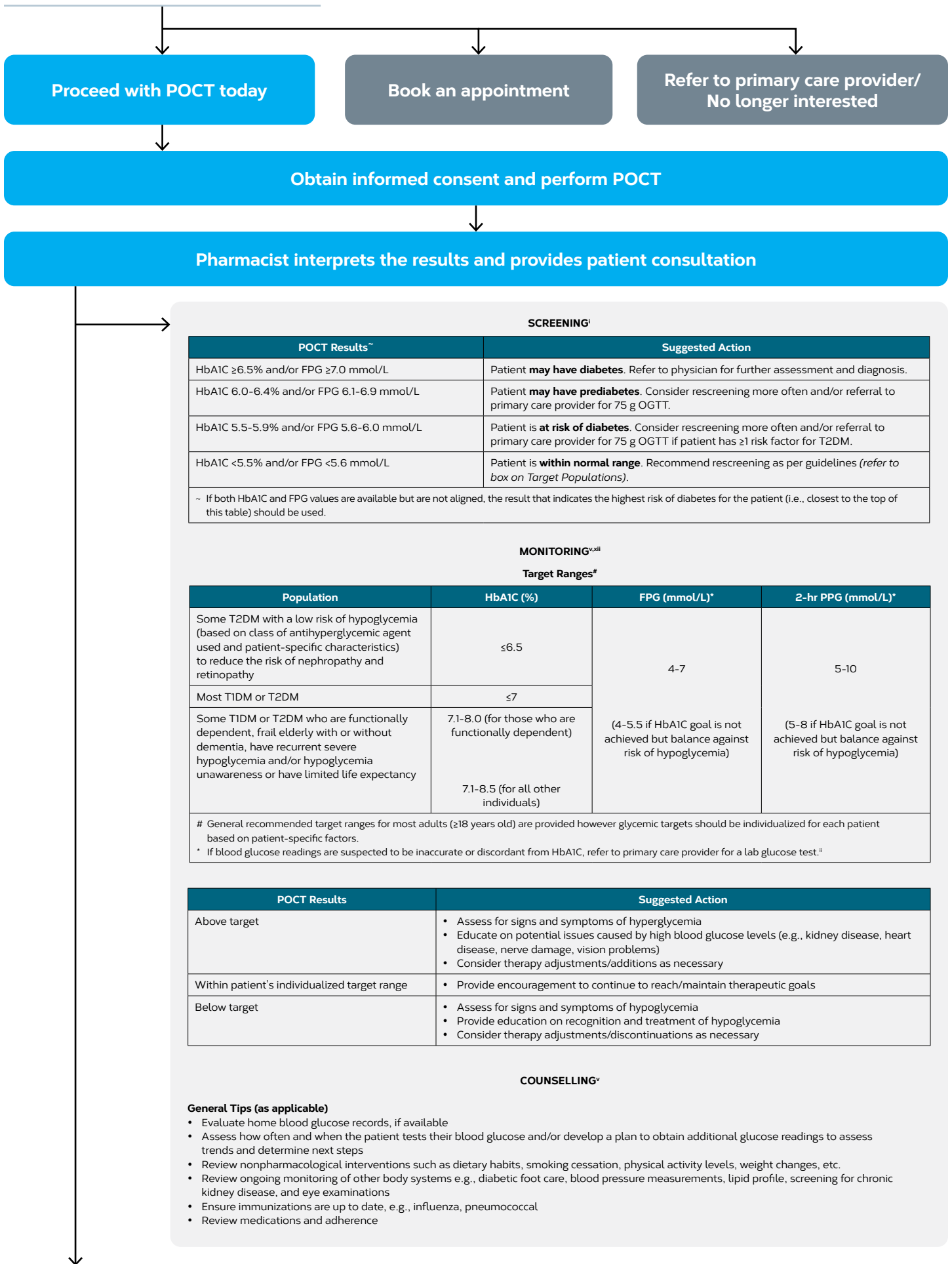
Capillary Blood Glucose Testing^{3,4}

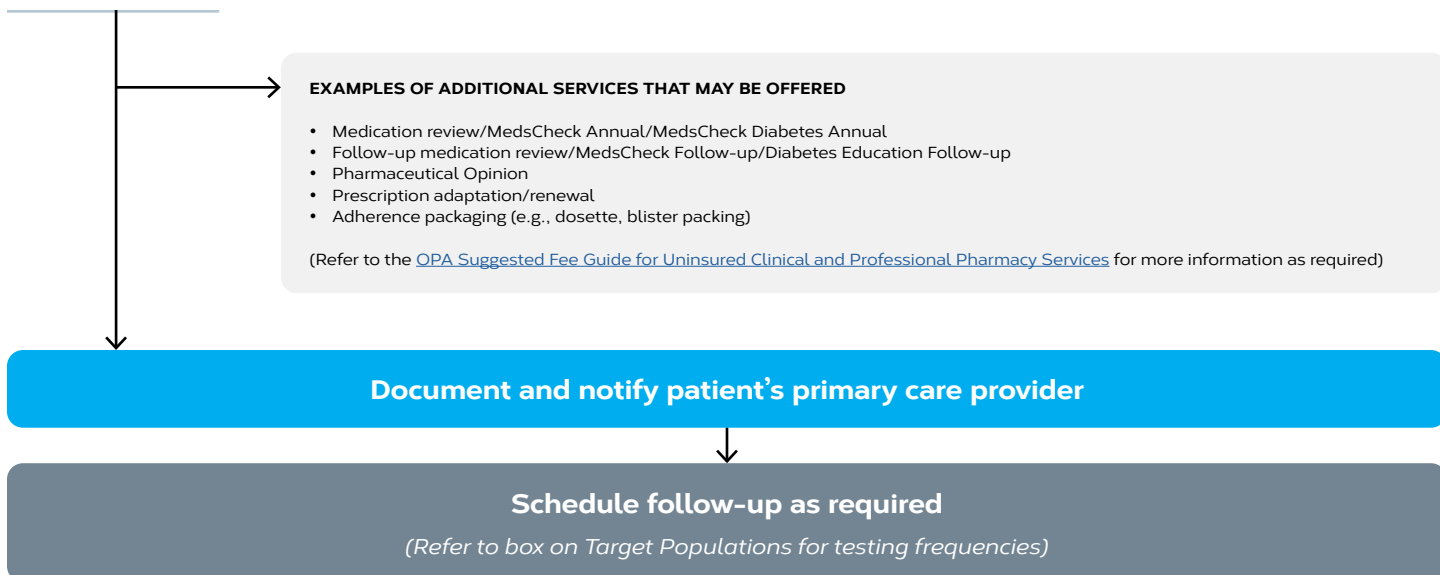
Population	Testing Frequency
Using insulin >1 time per day or an insulin pump	At least 3 times per day (mix of pre-/postprandial)
T2DM, using insulin once-daily (+/- antihyperglycemic agents)	At least once a day (at variable times)
T2DM, only on antihyperglycemic agents	Based on type of antihyperglycemic agent, HbA1C level, and hypoglycemia risk <ul style="list-style-type: none"> • HbA1C targets not met: structured testing (i.e., 7-point profile; fasting, pre/2-h postprandial at each meal, bedtime; every 1-3 months) • HbA1C targets met or not on antihyperglycemic agents associated with hypoglycemia: daily testing not recommended except during illness/at risk of hyperglycemia (e.g., surgery, steroid treatment)
HbA1C targets not met or experiencing hypoglycemic episodes	More frequent testing (4 times per day +/- overnight)
Recently diagnosed with diabetes (within last 6 months)	At least once a day (at variable times)
Treated only with lifestyle changes and meeting glycemic targets or pre-diabetic	Daily testing not usually required; occasional testing may be considered to help reinforce lifestyle changes

For more information regarding testing in other situations and/or special populations (e.g., children, pregnancy, etc.), refer to the [Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada](#).

Note: Prior to proceeding with the POCT, pharmacists are encouraged to review the patient's historical laboratory results via one of the provincial clinical viewers, where applicable.







Note: Information provided in this resource pertain to most adults ≥18 years of age. For more information, including guidance specific to special populations (e.g., children, pregnancy), please refer to the [Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada](#).

ABBREVIATIONS:

CANRISK: Canadian Diabetes Risk Assessment Questionnaire; **FPG:** fasting plasma glucose; **HbA1C:** hemoglobin A1C/glycated hemoglobin; **OGTT:** oral glucose tolerance test; **OHIP:** Ontario Health Insurance Plan; **POCT:** point-of-care test; **PPG:** postprandial glucose; **T1DM:** Type 1 Diabetes Mellitus; **T2DM:** Type 2 Diabetes Mellitus

DISCLAIMER:

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