

Self-Monitoring of Blood Glucose (SMBG): A Decision Tool for Providers

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Self-monitoring of blood glucose (SMBG) in non-insulin using diabetes (DM) is a hot topic. Escalating costs for persons with DM (pwDM) and the health care system, limited/unavailable data in support of testing for some populations, variable approaches to SMBG across and within provider groups, and the realities of testing and using test results for the pwDM and their health care providers have brought this issue to the forefront of ongoing and often uncomfortable debate.

Simple decision tools can assist DM care providers and persons with non-insulin using type 2 DM in determining the need for, and frequency of, SMBG.

With the help of a multidisciplinary working group (nurses and dietitians [diabetes educators], physicians, and pharmacists), a decision tool was created to allow a more objective look at SMBG. This tool can be used to guide, and focus, group discussion and individual decision on issues of greatest concern when considering SMBG. Four key areas of consideration include safety (risks of hyper- or hypoglycemia); appropriate/timely action based on SMBG results by Health Care Team (HCT); the individual's knowledge, skills, and willingness to test, record, and act on results; and self-management education. This simple tool is color coded to reinforce key concepts (pink areas indicate need for SMBG; green are required conditions before SMBG is recommended, etc.), prompts yes/no responses to key questions, and ensures consideration is given to issues that may impact the decision to SMBG. Examples of low and high intensity testing are provided.

The tool was refined to reflect working group comments and was tested with a number of cases that move from simple to more complex. These cases explore considerations related to diagnosis (newly diagnosed or follow-up), degree of hyperglycemia, type of DM treatment (oral agent or lifestyle only), risk of hypoglycemia, and the influences of age, occupation, interest, cognition, and motivation.

According to working group members, "this tool allows for a more objective look at each individual case and removes emotion and subjectivity from the equation." It allowed for a focus on patient safety, available evidence, individual capability, and HCT use of results.

This tool is currently being deployed across Nova Scotia. An accompanying video explains its purpose and "how to use" the tool. A patient tool is also under development.

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