Glucose Self-monitoring in Non–Insulin-Treated Patients With Type 2 Diabetes

Original Investigation  Research

The Need to Test Strategies Based on Common Sense

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“You have diabetes.”

In most care settings, this statement still triggers prescription of a glucometer and instruction on how to perform self-monitoring of blood glucose (SMBG). Every 3 months thereafter, patients’ glucose logs are reviewed and routine SMBG is encouraged, regardless of patients’ risk of hypoglycemia or severe hyperglycemia, because common sense tells us that patients who proactively manage and monitor their diabetes should achieve better outcomes. In this issue of JAMA Internal Medicine, Young and colleagues1 test this long-held belief, randomizing 450 patients with non-insulin-dependent type 2 diabetes to no SMBG, SMBG, and SMBG with enhanced patient feedback. At 1 year, there were no differences in glycemic control, health-related quality of life, or adverse events (including hypoglycemia frequency, health care utilization, or insulin initiation). Nearly 75% of patients engaged in routine SMBG prior to enrollment. These results suggest that we can safely advise patients to discontinue, as well as not initiate, SMBG.

This important study was funded by the Patient-Centered Outcomes Research Institute and illustrates how patient-centered clinical research can address clinical problems. The surprising findings make us question the current seemingly common sense–based strategy to encourage routine SMBG. These findings and others2 support the Choosing Wisely3 recommendations of the Society of General Internal Medicine and Endocrine Society that discourage frequent blood glucose monitoring among patients with type 2 diabetes. Routine SMBG merits a “less is more” designation because there were no clear benefits accrued, which leaves only possible harms.

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