

cine. To say that compliance of "less than 100% is unacceptable" is ludicrous. I hope this is not the future of health care system reform.

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1. Lardinois CK, Lougaris IA. Diabetes mellitus management 'PENTAD.' *Arch Fam Med.* 1994;3:304.

In reply

I appreciate Lawler's concern about the routine use of hemoglobin A_{1c} measurement as part of the evaluation for certain diabetic populations. Like Lawler, I have many patients who choose to maintain their glucose level between 13.9 and 16.6 mmol/L (250 and 300 mg/dL). Encouraging health care providers to do routine hemoglobin A_{1c} measurements for this subset of noncompliant patients probably adds nothing to their management and should be discouraged. I have, however, successfully persuaded many noncompliant patients to change by employing the measurement of hemoglobin A_{1c}. The hemoglobin A_{1c} measurement provides the patient an "average" blood glucose value over the past 2 months. The test helps patients overcome the anxiety and frustration associated with the often wild swings in their day-to-day home glucose monitoring values, even during times of sincere effort to improve glyce-mic control. A hemoglobin A_{1c} value of less than 125% of the upper limit of normal for the reference laboratory indicates acceptable glyce-mic control with mean daily glucose levels less than 8.3 mmol/L (150 mg/dL).

In those patients who are very compliant, I agree with Lawler that once you have established an acceptable hemoglobin A_{1c} value, the test need not be done routinely. I think it would be a mistake, however, to assume that the home glucose numbers that patients provide to the physician truly reflect daylong glyce-mic control without confirming this with a hemoglobin A_{1c} determination. Not infrequently, the blood glucose values that patients provide to the health care provider are in discordance with the hemoglobin A_{1c} determination.¹ When the home glucose numbers are consistently lower than what would be predicted by the hemoglobin A_{1c} determination, two important concerns must be addressed. First, home glucose monitoring techniques must be reassessed; many times a discrepancy can be explained by improper monitoring techniques. Second, patients want very much to please their health care provider. They do this by providing home glucose num-

bers that are "pleasing" to the health care provider, ie, 6.7 mmol/L (120 mg/dL). Regrettably, many of the values recorded in the logbook are phantom values and others are adjusted upward or downward to achieve a more desirable level.² Patients are also ingenious in their ability to fast for a prolonged period of time, resulting in an office glucose value that would be considered acceptable when in fact the hemoglobin A_{1c} measurement would refute this.

My statement that less than 100% compliance is unacceptable pertains to health care providers, not to patients. It is the responsibility of the health care provider to provide the information to the patient. The patient then chooses to be compliant or not. Each and every time a health care provider sees a patient with diabetes mellitus the five key elements of the PENTAD must be addressed. Not evaluating for early signs of retinopathy, nephropathy, and neuropathy and documenting in the medical records with 100% compliance is unacceptable. The same must be said for alert identification. If the health care provider has a recent hemoglobin A_{1c} measurement in the patient's record or determines that the test adds nothing to the treatment of the patient, then ordering the test is not cost-effective and should not be done. The health care provider must document this in the patient's medical record, however. If the health care provider fails to include something in the medical records regarding the use of the hemoglobin A_{1c} determination, whether positive or negative, I believe this is unacceptable. I agree wholeheartedly that a hemoglobin A_{1c} determination at each office visit would not be cost-effective. It was not my intention to make the test mandatory with each office visit, only to recognize the importance of the test in treating patients with diabetes mellitus.

In summary, when used appropriately, the PENTAD stimulates the health care provider to recognize the early signs of diabetic complications. Early intervention will retard the progression to end-stage disease with a substantial savings to our already overburdened health care system. I have also found that the PENTAD enriches the physician-patient relationship, which often means better patient compliance with diabetes management.

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1. Campbell LV, Ashwell SM, Borkman M, Chrisholm DJ. White-coat hyperglycemia: disparity between diabetes clinic and home blood glucose concentrations. *BMJ.* 1992;305:1194-1196.
2. Mazze RS, Shamon H, Pasmantier R, et al. Reliability of blood glucose monitoring by patients with diabetes mellitus. *Am J Med.* 1984;77:211-217.