

respondents would have chosen 3 years and 5 years for follow-up of a small tubular adenoma. In our survey, almost the same number (25%) of respondents chose to survey a small tubular adenoma in 1 year or less as those who chose 5 years, and 46% chose a 3-year surveillance interval.

This suggests that when given a range of guideline-based intervals, most respondents would tend to recommend surveillance at or before the earliest interval. We agree that the combined ACS and USMSTF guidelines from 2006 (3) will hopefully decrease confusion over surveillance guidelines from several societies.

We appreciate the comments from Dr. Otto regarding the need for communication between endoscopists and primary care physicians. One conclusion from our study is that further educational efforts are necessary to change current inappropriate referral patterns. An important part of this change may include recommendations to the primary care physician for the next surveillance colonoscopy based on the index colonoscopy findings after the pathology of polyps has been read. The excessive use of more frequent colonoscopy than is necessary may need to be emphasized to overcome current fears of small missed polyps and the development of colorectal neoplasia in very-low-risk patients.

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### Effect of Inhaled Insulin on Fasting and Postprandial Plasma Glucose

**TO THE EDITOR:** We read Ceglia and colleagues' meta-analysis (1) on the efficacy and safety of inhaled insulin with great interest. Their analysis provides a valuable appraisal of this new form of insulin delivery. It is 1 of very few studies of inhaled insulin that have not sponsored by the manufacturer, and therefore it is less likely to be associated with bias. However, we disagree with the authors' reasoning for not collecting data on fasting or postprandial glucose values because they "were self-reported and therefore were less reliable than hemoglobin A<sub>1c</sub> levels" (1). In fact, at least 7 of the 16 trials included in the meta-analysis (2–8) obtained both fasting and postprandial plasma glucose values in the laboratory setting and considered these values to be secondary efficacy end points. Results from these trials

were mixed: Some studies showed superior (3–5, 7, 8), whereas others reported similar (2, 6), effects of inhaled insulin in improving 1 or both glucose variables compared with the comparison groups. It would be interesting if Ceglia and colleagues would analyze the fasting and postprandial plasma glucose levels from all trials that reported these values to estimate the global effect. The postprandial plasma glucose values are particularly important because inhaled insulin has a short duration of action that is designed to control postprandial hyperglycemia.

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**IN RESPONSE:** We thank Dr. Mikhail and colleagues for their comments, and we appreciate the opportunity to respond. We chose not to present data on fasting plasma glucose because this measure reflects the effectiveness of a long-acting basal insulin regimen or oral medication rather than that of inhaled insulin therapy, which has a short time of action. Furthermore, fasting blood glucose is a less reliable measure of glycemia in open-label trials because it can be affected by short-term changes in various factors. After combining data for fasting blood glucose available from 8 of the 16 trials (1–8) included in our meta-analysis, we found statistically significant dif-

ferences in fasting blood glucose levels from baseline favoring the inhaled insulin group (weighted mean difference vs. subcutaneous insulin,  $-1.43$  mmol/L [ $-25.8$  mg/dL] [95% CI,  $-2.33$  to  $-0.54$  mmol/L [ $-41.9$  to  $-9.7$  mg/dL]]; weighted mean difference vs. oral agents,  $-1.23$  mmol/L [ $-22.1$  mg/dL] [CI,  $-2.44$  to  $-0.02$  mmol/L [ $-44.0$  to  $-0.3$  mg/dL]]) but with significant heterogeneity among studies.

We agree with Dr. Mikhail and colleagues that the effect of inhaled insulin on postprandial hyperglycemia is of interest, given the premeal indication for inhaled insulin therapy. Only 5 of the 16 trials (3–7) in our meta-analysis reported postprandial blood glucose levels using the same standard meal (16 oz. of Boost liquid meal [Mead Johnson Nutritionals, Evansville, Indiana]). No trial specified whether insulin (inhaled or subcutaneous) was administered shortly before the liquid meal. When we combined the data from these trials, we found no statistically significant differences in postprandial blood glucose levels (weighted mean differences,  $-0.82$  mmol/L [ $-14.8$  mg/dL] [CI,  $-1.84$  to  $-0.20$  mmol/L [ $-33.2$  to  $3.6$  mg/dL]] and  $-2.49$  mmol/L [ $-44.9$  mg/dL] [CI,  $-5.12$  to  $-0.13$  mmol/L [ $-92.2$  to  $2.3$  mg/dL]], respectively).

The results of the fasting and postprandial glucose concentrations, which tend to favor inhaled insulin over subcutaneous insulin, contrast with the hemoglobin A<sub>1c</sub> results, which slightly favored subcutaneous insulin.

In our analysis, we elected to present only the change in hemoglobin A<sub>1c</sub> concentration because it is a measure that captures both fasting and postprandial glycemia and is the most reliable and least-biased glycemic measure (9). Hemoglobin A<sub>1c</sub> is also the best predictor of diabetic complications. Hemoglobin A<sub>1c</sub> is, therefore, the preferred outcome when evaluating the glycemic efficacy of new diabetes therapies (10).

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### Pay-for-Performance and Accountability

**TO THE EDITOR:** The American Board of Internal Medicine (ABIM) is pleased that the Kimball lecture given at the 2005 ABIM Foundation Forum was published. It is an annual lecture (1) in honor of Harry Kimball (not “Harvey,” as originally stated in the article), the Chief Executive Officer of ABIM and ABIM Foundation from 1990 to 2003.

It is also important to point out that Rowe is incorrect in his statement that the Maintenance of Certification (MOC) program does not measure quality frequently enough to be relevant to pay-for-performance programs. To the contrary, several major regional and national health plans (including Dr. Rowe’s former company, Aetna; UnitedHealthcare; Humana; Health Alliance Plan of southeastern Michigan; and Blue Cross and Blue Shield plans in Nebraska, New Jersey, Pennsylvania, Puerto Rico, and Tennessee) have recognized the relevance of board certification and recertification in the past year by incorporating them in their reward and recognition programs (2), and many more seem poised to do so. It is particularly important to note that “the utility of these professional databases” has not been limited because “some certification programs measure performance at 10-year intervals” (1). In fact, these health plan programs reward physicians who measure performance annually or every other year through the MOC process.

Although the total cycle is 10 years, MOC in any specialty of the American Board of Medical Specialties is becoming a series of assessment activities over the course of the 10-year cycle. The alignment of health plan incentives with professionally led efforts to measure and improve care can significantly reduce the burden associated with collecting data for both purposes. The ABIM is committed to making the measurement associated with MOC both timely and clinically relevant.

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