Clinical Diabetes: Imagination and Innovation

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Forecasts are rarely sanguine. Diabetes incidence and prevalence are projected to increase as the general population gets older, bigger, and more racially diverse. (Age, obesity, and ethnic background constitute three important risk factors for diabetes.) Diabetes will result in higher rates of blindness, amputation, dialysis, stroke, myocardial infarction, and death. Onset of complications will occur at an earlier age as type 2 diabetes extends its reach to younger individuals. The burden to the individual and society will be enormous. Costs will soar.

Moreover, primary care physicians, already beseeched by every specialty organization to do more, will not have time to meet basic quality-of-care criteria. Estimates are that it would take a full-time primary care physician (panel size of 2,500) 7.4 hours/day to simply address basic preventive services in a typical practice setting.[1] And that just includes those recommendations with a sound evidence base. New studies seem destined to conclude that "more is more," notwithstanding a physician work week that easily averages 55–60 hours/week.

At the very least, new is better than old. Those who are slow to change their practice, once regarded as cautious or sober, will be an obstacle to innovation diffusion and at best be characterized as "late adapters." Caring for patients, once centralized and the sole purview of clinicians, will become more fragmented as disease management companies

carve out increasingly large portions of care to be delivered by phone centers, which, in part, remind patients of the list of issues their clinicians should address.

Yet imagination and innovation will belie foreboding, as articles in this issue of *Clinical Diabetes* attest.

Smoking prevalence once stood at nearly 50% of the U.S. population and was thought to be hopelessly immutable (much like obesity). Today, through a combination of education, social marketing, and legislation, < 25% of U.S. adults smoke. The article by Sarah K. Ford, PharmD, and Betsy Bryant Shilliday, Pharm, CDE, in this issue of *Clinical Diabetes* (p. 133) provides guidance to further address this still unacceptably high prevalence.

Can insulin, once the product of grinding pancreas in large plants in Indianapolis, Ind., in the mid-1920s, be inhaled? Yes. Pamela F. Hite et al. (p. 110) provide an overview of this recently approved method of insulin delivery, which may partially mitigate a great barrier of diabetes care: adherence.

Hypoglycemia, once a seeming reality of diabetes care, has been far better understood through seminal observations summarized by Vanessa J. Briscoe, PhD, and Stephen N. Davis, MD (p. 115). Beyond understanding, newer therapeutics have been developed that are simply safer because they cause fewer episodes of hypoglycemia. Perhaps more than most conditions, effectiveness of diabetes control is inextricably linked to safety.

Yet effectiveness is different from efficacy. Efficacy, the ability to reach a desired outcome in a controlled setting, has been established for many aspects of diabetes care. Effectiveness, the ability to reach a desired outcome in a real-world setting, has proved more challenging. There is no shortage of organizations that declare, sometimes rightly, that we are doing a poor job of reaching quality-of-care goals. Diabetes, like heart failure and many cancer screening procedures, is replete with reasonably clear data on what constitutes good quality of care. Diabetes, along with a handful of other conditions, has become a focal point for efforts to improve quality.

The efforts abound, from the structured approach of the Institute for Healthcare Improvement, to a nurse putting a sticky note on a chart to remind a doctor to do a foot exam, and from "open access" scheduling to practice-management software that provides endless reminders. Some succeed, few are sustained, and fewer still are applicable across settings.

Beginning in January 2007, *Clinical Diabetes* will introduce a new regular department titled "Bridges to Excellence" to draw on the imagination of our readers to engage this effort. Readers are invited to submit vignettes of specific, local efforts to improve diabetes care in their practices, practices that provide so much more than diabetes care. Selected vignettes will be selected and published, along with a commentary by a member of our editorial team or an outside expert. The commentary will highlight features of the effort that may be applicable in different settings and will provide general guidance on starting and sustaining improvement initiatives within the context of a busy practice. Updated guidelines for writing and submitting vignettes and other *Clinical Diabetes* articles will be available soon on the journal website http://clinical.diabetesjournals.org.

Another new department, for primary care physicians-in-training, will also be introduced in January 2007 and will be titled "Diabetes: A Foundation." This department, which will take the form of a 12-part series spanning 3 years, will provide core information to equip physicians-in-training with the ability to provide state-of-the-art diabetes care.

I am particularly thankful for our new editorial team: John B. Buse, MD, PhD, CDE, FACE; Michael J. Fowler, MD; Martha M. Funnell, MS, RN, CDE; and Michael Pignone, MD, MPH, for their sober and creative input as we launch these new initiatives. I am also thankful to Dr. Jennifer Marks and her editorial team for their steady leadership of the journal during the past 3 1/2 years.

Diabetes is common, consequential, and costly. Our ability to control diabetes is not for want of information but for lack of imagination. Our forecast is sanguine.

REFERENCES

[1]Yarnall KS, Pollak KI, Ostbye T, Krause KM, Michener JL: Primary care: is there enough time for prevention? *Am J Public Health* 93:635–641, 2003