Cure, Quality Care, Absolute Commitment: Together We Can Make It Happen

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Editor’s note: This article is adapted from the address of the American Diabetes Association President, Health Care & Education, given in June 2006 at the association’s 66th Annual Meeting and Scientific Sessions in Washington, D.C.

The commitment of the American Diabetes Association (ADA) to funding research, improving treatment, and finding a cure for diabetes is as steadfast as ever. The numbers continue to skyrocket; some 20.8 million Americans now have diabetes—6.2 million of whom remain undiagnosed—and 41 million have pre-diabetes, most of whom do not know they have it. A full one-third to one-half of Americans will develop diabetes unless we do something to stop this epidemic.

Have we at ADA done all there is to do? No, this is just the beginning of the journey to fulfill our mission. We have more work to do; our many constituent groups—health care providers and caregivers, researchers, advocates, members, families, and volunteers—are our greatest strengths. If we want to make a difference for cure and care, then we need to mobilize all of these voices and all sing from the same page. We need a rallying cry and we need to move us further along the path toward fulfilling our mission at ADA.

Research and Diabetes Educators

Research provides the opportunity to collect evidence supporting the most effective DSME models. Using mathematical modeling technology, a program called the Archimedes system, developed by David Eddy, MD, PhD, and Kaiser Permanente,¹ was used to develop the ADA’s Personal Health Decision (PHD) program. This model has been subjected to many other validation exercises that involve simulating real clinical trials at a high level of detail and comparing the model’s results with the results actually observed in the trials. The ADA convened an independent committee that selected trials spanning the natural history of the disease, its complications, and its treatments.¹ The Archimedes system was able to predict the outcomes of the following trials:⁰

- U.K. Prospective Diabetes Study
- Diabetes Prevention Program
- Heart Protection Study
- Heart Outcomes Prevention Evaluation
- Micro-HOPE (Heart Outcomes Prevention Evaluation)
- Cholesterol and Recurrent Events Trial
- Diabetes Control and Complications Trial
- Long-Term Intervention With Pravastatin in Ischemic Disease
- Helsinki Heart Study
- West of Scotland Coronary Prevention Study
- Veterans Affairs High-Density Lipoprotein Intervention Trial
- Hypertension Optimal Treatment Trial
- ACE Inhibitors and Diabetic Nephropathy Trial
- Pravastatin Pooling Project
- Collaborative Atorvastatin Diabetes Study
- Early Treatment Diabetic Retinopathy Study

Using the Archimedes model, Robert Rizza, MD, simulated the outcome if diabetes were cured tomorrow.³ According to his study, the impact of a cure for diabetes would be phenomenal and would include:

- A 45% reduction in serious complications
- 41 million fewer life-changing adverse events
- $700 billion or ~ $24 billion dollars per year of reduction in medical costs.

Dr. Rizza also simulated what would happen is every person with diabetes received “optimal care,” defined as a hemoglobin A₁c (A1C) < 7%; blood pressure < 130/80 mmHg; LDL cholesterol < 100 mg/dl with statin therapy; HDL cholesterol > 40 mg/dl in men and > 50 mg/dl in women; triglycerides < 150 mg/dl; BMI < 25
kg/m²; aspirin therapy; and smoking cessation.

The impact of optimal care for diabetes included:

- a 57% reduction in risk of complications
- 18 million fewer life-changing adverse events
- $325 billion or $11 billion per year of reduction in medical costs.

Finally, Dr. Rizza asked what the impact would be of a more feasible intervention involving 80% of people with diabetes taking a “polypill” containing metformin, 1,000 mg/day; aspirin, 75 mg; generic statin (e.g., simvastatin) 40 mg; generic ACE inhibitor, (e.g., lisinopril) 10 mg at a medication cost of $100 per year. The impact included:

- a 34% reduction in risk of complications
- 11 million fewer life-changing adverse events
- $350 billion reduction in medical costs.

Medicine Plus DSME: The Real Polypill
Combining the “polypill” with adequate DSME could result in a “double-strength” form of diabetes care. Our ADA focus is very clear: cure, care, and commitment. Our role as diabetes educators is very clearly an expression of the components of care and commitment. Diabetes educators always advocate for the best possible care for patients through support and facilitation of patients’ independence and skill and the recognition that our primary responsibility is to patients.

To fulfill our role as diabetes educators, we need to challenge ourselves to step outside the comfortable information-giver role within diabetes centers and consider partnering with primary care physicians who provide care for 80% of all people with diabetes. What can diabetes educators do for primary care? One important service would be to provide the expertise that is within the educator skill sets but often lacking in primary care. Necessary medication would not be ignored, but too often, necessary education is. Diabetes educators can help to secure insurance funding for patient education, help to delineate how educator and provider roles are complementary rather than conflict-

ing, and step up to the plate to support timely and aggressive interventions in both medicine and education.

A potential practice model could be developed. Physicians are experienced in following algorithms; perhaps the development of an algorithm for working effectively with a diabetes educator would be a positive step toward achieving successful collaboration. In addition, the ADA can continue to work with other organizations, reach out to providers, focus on clinical standards of care, and promote the incorporation of diabetes education into primary care practices. This work cannot be done without the active involvement of diabetes educators.

Using the Chronic Care Model for DSME
Siminerio and colleagues showed improvement in outcomes when certified diabetes educators were integrated into primary care offices at the University of Pittsburgh Medical Center (Pittsburgh, Pa.). This effort increased access to DSME, increased communication, and brought about improvements in A1C and patient satisfaction. During the study, the number of medical center programs with ADA education recognition grew from 3 to 21, and applications for additional sites were submitted.

An initiative of the International Diabetes Center (Minneapolis, Minn.), called Partners in Advancing Care and Education Solutions, set out to improve diabetes care and education at 10 diabetes centers across the country. Each center was encouraged to meet the criteria to apply for the National Committee on Quality Assurance (NCQA)/ADA Diabetes Physician Recognition program and also to achieve and or expand ADA education recognition and to maximize revenue and control expenses. The program outcomes showed that 90% achieved or expanded ADA education program recognition and achieved NCQA/ADA physician recognition. Postintervention evaluation also demonstrated a change in the level of coding and estimated increase in gross revenue projections.

Our commitment as diabetes educators and professional members of the ADA is to provide the best care possible by focusing on the people with diabetes and their needs and facilitating their decisions to make lifestyle changes. This commitment requires us to see our patients as people first, not as blood glucose values. Our first priority is to address patients’ psychosocial issues and needs, their fears, frustrations, and concerns. Our success lies in creating a collaborative relationship with patients. Blood glucose values and other laboratory numbers belong to patients and not to their educators. To be our best, we need to remember that the ADA is a patient-centered organization.

Diabetes educators are the embodiment of caring and commitment, two of the three components of the ADA’s focus. Our role is as important as that of those addressing the third component, finding a cure. Cure, care, and commitment: together we can make it happen.

References

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