Today is a remarkable time in diabetes care. Diabetes has reached epidemic proportions worldwide. An estimated 17 million Americans have this deadly disease, while another 16 million have pre-diabetes, or impaired glucose tolerance (IGT). With the aging of the U.S. population and our increasing life expectancy, the demand for diabetes care is only expected to increase. Recognition is growing that diabetes is a serious disease and a major contributor to escalating health care costs. The costs of the disease as well as concerns about access to quality diabetes care are making diabetes a national priority.

At the same time, diabetes care has become increasingly sophisticated. Diabetes research has resulted in newer insulins and medications, better systems for insulin delivery and self-monitoring of blood glucose, and more aggressive treatment of diabetes complications and comorbid conditions. Clinical care of diabetes has more treatment options than ever before, and many more are in the pipeline.

Simultaneously, changes in the health care system and public policy have shifted diabetes treatment from acute care settings, such as hospitals, toward outpatient facilities and managed care organizations. The drive to cost-effective treatment is intense. Increasingly, health care professionals who specialize in the care of people with chronic illnesses such as diabetes are increasingly recognized as an important group. A greater focus on health promotion and prevention is increasingly evident. Diabetes health care providers seek to expand their niche in today’s health care environment. The team approach to diabetes care has long been advocated, and the benefits of a team approach to diabetes management have been well documented.1–4

Still another driving force in diabetes care today is the changing face of the American public. As baby boomers join the ranks of the “elderly,” consumers continue to become more knowledgeable, more politically active, and more insistent about the health care they receive. Consumers want quality care that is accessible and cost-effective.

These factors and others have set the stage for significant changes in how diabetes care has been provided over the past decade. Most disciplines involved in diabetes care have developed professional practice standards for diabetes, and standardized outcome measurement tools have been developed and are in use. Indeed, diabetes care has developed into a highly specialized field with an emerging trend toward advanced practice-level care—the topic of this From Research to Practice section.

**Why Advanced Practice in Diabetes Care?**

Numerous studies, including the Diabetes Control and Complications Trial,5 the Kumamoto Study,6 and the U.K. Prospective Diabetes Study,7 have demonstrated that intensive diabetes management can reduce the risk of onset and progression of long-term complications of diabetes. Most recently, the Diabetes Prevention Program8 provided further evidence for the benefit of providing intensive therapy to patients with IGT to prevent, or at least delay, the onset of diabetes. The intensive management offered within these landmark studies required and exemplified a higher level of skill for the health care team members working with diabetes.
patients and their families. The stage was being set for the development of an advanced practice credential for clinical diabetes managers.

These studies offered major opportunities for health care professionals to expand their roles beyond traditional boundaries and to demonstrate their effectiveness in performing at an advanced level of practice. Several studies have suggested that the quality of care provided by primary care nurse practitioners is equal to that provided by physicians or leads to the same outcomes as care provided by primary care physicians.

Some potential benefits of adding advanced diabetes managers to primary care include cost containment and improved quality and continuity of care. Additionally, as health professionals earn the credential of advanced diabetes manager, they will be available and identifiable for consultation, education, management, and research. Advanced practice diabetes managers will serve as role models and leaders who creatively adapt to our rapidly changing health care system.

What Is the BC-ADM Credential?

In 1993, the American Association of Diabetes Educators (AADE) and the American Diabetes Association created a task force to review the role of advanced practice nurses in diabetes care and discuss ways to achieve recognition for the unique part they play within the diabetes care team. In advanced practice, clinical care was added to the skill set of the widely recognized and established certified diabetes educator (CDE) credential, and this addition created the need for a means of verifying clinical care skills among advanced practitioners. The Board Certified—Advanced Diabetes Manager (BC-ADM) credential was developed to meet this need.

As discussion about the possible development of a new credential continued, members of this task force realized that, because of the interdisciplinary nature of diabetes care teams, the need for a new advanced diabetes manager credential reached beyond the nursing profession. The goal of the task force thus expanded to include advanced practitioners not only in nursing, but also in the disciplines of nutrition and pharmacy.

AADE soon invited the American Nurses Credentialing Center (ANCC), the world’s largest certifying/credentialing organization for nurses, to join the discussion, and ANCC lent its reputation of credibility and excellence to this important project. The Commission on Dietetic Registration of The American Dietetic Association and the American Pharmaceutical Association also supported the concept of this new credential and became involved in its planning and development.

Role delineation studies to determine information about professional practices were conducted for four practice groups: registered nurses, clinical nurse specialists and nurse practitioners, registered dietitians, and registered pharmacists. A Content Expert Panel (CEP) was appointed to develop the test content outline for the new credential based on the results of the role delineation studies. The CEP developed an outline based on equal expectations for all disciplines working in diabetes.

Numerous surveys were conducted within constituent groups to verify the level of interest in the development of a new credential. Test item writers were trained, and four distinct versions of the exam were created: one each for nurse practitioners, clinical nurse specialists, dietitians, and pharmacists. And the BC-ADM credential was born.

This multidisciplinary credential is the culmination of many years of effort by several organizations. Available for nurses, dietitians, and pharmacists who have advanced degrees, it is different from the CDE credential in that it focuses on advanced clinical management of diabetes. Although advanced practice dietitians, pharmacists, and nurses seeking certification take different versions of the examination designed specifically for their own profession, all of the exams cover the domains of clinical practice, collaboration, research, patient and professional diabetes education, and public and community health.

The first BC-ADM examination was offered in the spring of 2002. Exams are now available via computer at Sylvan Learning Centers across the country. At present, more than 300 diabetes health professionals can identify themselves as BC-ADMs. For more information on attaining certification, visit www.nursecredentialing.org, www.ncbde.org, or www.aadenet.org.

Because advanced practice in diabetes care is still evolving, it is interesting to look at the components of advanced practice roles and at some examples of how diabetes care can be enhanced using advanced practice diabetes managers. Many practitioners are wondering about the new BC-ADM credential and evaluating the possible benefits to their own professional situation. Other practitioners are planning their career paths with an eye toward becoming advanced practice diabetes managers in the future.

In this issue, we are most fortunate to have a group of highly experienced and skilled diabetes clinicians as authors. First, Virginia Valentine, CNS, BC-ADM, CDE, Kameen Kulkarni, MS, RD, BC-ADM, CDE, and Debbie Hinnen, ARNP, BC-ADM, CDE, provide an overview of the new credential, including how it evolved, what it means, and how it differs from the CDE credential (p. 27). Next, three more advanced practice clinicians, one from each discipline eligible for the BC-ADM, present actual cases from their practices that illustrate their role as advanced diabetes managers. Geralyn Spollett, M SN, C-ANP, CDE, presents a patient with type 2 diabetes and a complex set of comorbidities (p. 32). Claudia Shwise-Slavin, MS, RD, BC-ADM, CDE, discusses her role in treating a patient with type 1 diabetes and hypoglycemia unawareness (p. 37). And Peggy Yarborough, PharmD, MS, BC-ADM, CDE, FAPP, FASHP, NAP, reviews her role in managing a patient with type 2 diabetes and asthma, who was referred for pharmacotherapy assessment and diabetes management (p. 41). Finally, co-guest editor Davida F. Kruger, M SN, APRN, BC-ADM, offers her perspective on the future of advanced practice in diabetes care (p. 49).

We hope this issue dedicated to the topic of advanced diabetes management will help explain what the new BC-ADM credential is, why it was developed, and how it might be applied in the clinical practice of each discipline. We encourage all eligible diabetes health care professionals to seriously consider whether this new credential could enhance their own practice settings and professional growth.

References


Mundinger MO, Kane RL, Lenz ER, Totten AM, Tsai WY, Cleary PD, Friedewald WT, Siu AL, Shelanski ML: Primary care outcomes in patients treated by nurse practitioners or physicians: a randomized trial. JAMA 283:59-68, 2000


H inner D: Why should I take one more exam? From larvae to butterflies. Diabetes Spectrum 15:132-133, 2002