This article describes the Type 2 Diabetes BASICS curriculum, an evidence-based education program that, when used in educator programs, has reduced hemoglobin A1c and body weight in people with type 2 diabetes in both individual and group education. This curriculum has also served as a model for the Insulin BASICS and Gestational Diabetes BASICS programs and has been implemented in various education and research settings, including work sites. These curriculums provide all of the needed materials for an education program, as well as extensive tips and guides to increase individualization of information and activities to engage program participants in transferring knowledge and skills in a variety of situations.

In Brief

Nearly 40 years ago, Donnell Etzwiler, MD, established one of the nation’s first outpatient diabetes education centers. A team of three—dietitian, nurse, and physician—offered individualized clinical and educational guidance to prepare people with diabetes to make self-management decisions on their own. This approach was unique at the time in that it was based on the belief that people with diabetes are at the center of the health care team and can learn to self-manage their diabetes, a theme championed by Dr. Etzwiler. This vision was shared with other health professionals through training programs held at the center and eventually throughout the world. It remains the foundation for practice at the International Diabetes Center (IDC) in Minneapolis, Minn.

In the mid-1990s, Patti Rickheim, MS, RN, CDE, an IDC educator, led the challenge to take a closer look at the center’s education programs. Although experience indicated that the IDC was successful in providing patient education, evidence-based care was becoming important, and there was a national need to more carefully track and report educational and clinical outcomes. IDC staff asked: Are we really doing the best we can? How can we better document what we are doing and have outcome data? They also wanted to more carefully describe their education program so that the education staff, which was now five times the size of the original team, could ensure consistency in messages, focus, and delivery, thereby establishing a basis for ongoing evaluation and quality improvement.

Rickheim and her colleagues set out to create and implement a comprehensive, standardized, outcomes-based curriculum for type 2 diabetes that they and others could replicate and evaluate in a variety of settings. This article reviews the conceptual framework that guided the original curriculum development and the 2004 revision, outcomes research on its use in groups and with individuals, its successful use in other health settings and nontraditional settings, and implementation challenges.

Theoretical Framework

The curriculum targeted adults with newly diagnosed type 2 diabetes and those who had little to no education, regardless of the amount of time since diagnosis. The National Standards for Diabetes Self-Management Education identified the content that is necessary to include in a diabetes curriculum and the overarching structure of developing an education program. Yet, sequencing content and how to best facilitate the learning process was not defined, nor was there a widely available comprehensive curriculum
for type 2 diabetes. There was also little research providing evidence to guide decisions about structure, sequencing, and focus.

A thorough literature review of learning theory and the psychology of behavior change was conducted to help define a theoretical framework for the curriculum. Four main building frameworks were selected to guide the development of the curriculum: Adult Learning Theory, the Health Belief Model, the Transtheoretical (Stages of Change) Model, and the Public Health Nursing Model.

**Adult Learning Theory**
The Adult Learning Theory was developed in the 1950s, when Malcolm Knowles resurrected the concept of andragogy, or the science of adult learning, and applied it to informal adult education. His development of a conceptual basis for adult learning was built on the premise that adults learn differently than do children and have specific learning needs based on particular characteristics gained through life experiences (Table 1).

Knowles’ work became widely adopted and helped shift educators away from “educating” adults toward “facilitating learning.” Subsequent research has built on this work, bringing to bear the importance of creating a positive, respectful, nonjudgmental, safe, engaging, and fun environment (learning style).

**Health Belief Model**
Social psychologists Hochbaum, Rosenstock, and Kegels developed the Health Belief Model in the 1950s while working for the U.S. Public Health Services. Their initial goal was to understand why people were failing to take advantage of a free tuberculosis-screening program. Their findings demonstrated to them that personal health behaviors arise from the tension between the perceived threats of a given health condition and the perceived benefits of (or barriers to) taking action to address that condition (Table 2). In the late 1980s, Rosenstock and others added “self-efficacy” to the model, which addresses the confidence individuals have in their ability to take action.

The curriculum structure includes time and methods for exploring participants’ thoughts about having diabetes and their beliefs about taking action (self-efficacy), which helps them to answer the questions: What does having diabetes mean to me? and What do I want and need to do to care for my diabetes? The stimulus to action can then be guided by the individual’s acknowledged beliefs and desires.

**Stages of Change**
Prochaska’s Transtheoretical (Stages of Change) Model is the third building block from which the team developed the curriculum conceptual framework. Prochaska’s personal and professional curiosity about how people change led him to do a systematic review in 1979 of 18 leading systems of therapy to identify processes of change. This work, together with his analytical study with DiClemente in 1982 of how smokers change their behavior, resulted in his identification of five stages of change, from precontemplation to maintenance (Table 3).

The Prochaska model shows that understanding a person’s stage of readiness for change helps predict...
whether interventions and learning will be effective motivators. This work highlighted the process one goes through in readying oneself for change and established a basic timeframe for reinforcing new behaviors to counteract the natural tendency to backslide when trying to make changes.

The curriculum embraces the concept of readiness with “My Diabetes Success Plan,” a goal-setting and tracking tool that reflects both Prochaska’s readiness theory and the seven diabetes self-management behavior areas identified by the American Association of Diabetes Educators. It supports educators in helping individuals to focus on one change they are ready to work on among the many they may be faced with, and to define their expectations. The tool (Figure 1) also helps patients and educators evaluate progress in the most positive terms possible. Patient focus groups held during the development of the Diabetes Success Plan revealed that being positive and using positive terminology to discuss change was a very important aspect of the goal-setting process.

The four sessions of the curriculum occur in concert with Prochaska’s behavior change timeframe. For example, session 3 occurs 3 months after the initial session. At this point, patients have had adequate time to practice new behaviors, and the potential for adopting these new behaviors permanently is very high. The potential for returning to previous behaviors is also present. In either situation, Session 3 comes at a crucial time and offers patients support and reinforecment for their new behaviors.

Public Health Nursing Model
The Public Health Nursing Model considers health priorities and interventions for communities and populations. This model was designed to recognize the needs of the patient’s family, which is vital to ensuring that patients have an effective support system.

To achieve these goals, the model advocates three types of health intervention:

1. Education: to provide patients and families with information and skills to cope with health concerns and their effects on the family and to encourage voluntary changes in attitude and behavior
2. Engineering: to manage risk-related variables through the use of appropriate technologies, such as finding a blood glucose meter that works best for a given client
3. Enforcement: to take action to influence health care regulation that will lead to favorable health outcomes.

Patients’ family members and significant others are encouraged to participate in all education sessions. In fact, scheduling for groups takes into consideration that each participant may bring one or more attendees so that the room can comfortably accommodate everyone. The participant book, which is part of the curriculum package, includes content for all sessions of the curriculum as well as Table 3. Stages of Change.

Table 3. Stages of Change

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Does not intend to make a change in the next 6 months.</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Thinking about change within the next 6 months.</td>
</tr>
<tr>
<td>Preparation</td>
<td>Intends to make a change in the next month.</td>
</tr>
<tr>
<td>Action</td>
<td>Has taken a definitive action to change.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Has maintained the new behavior over time (at least 6 months).</td>
</tr>
</tbody>
</table>

To achieve these goals, the model advocates three types of health intervention:

1. Education: to provide patients and families with information and skills to cope with health concerns and their effects on the family and to encourage voluntary changes in attitude and behavior
2. Engineering: to manage risk-related variables through the use of appropriate technologies, such as finding a blood glucose meter that works best for a given client
3. Enforcement: to take action to influence health care regulation that will lead to favorable health outcomes.

Figure 1. My Diabetes Success Plan. ©2004 International Diabetes Center, Parc Nicollet, Minneapolis, Minn.
as supplemental material in the appendixes. It serves as a valuable resource to share with others who are not able to attend education sessions with patients, as well as a guide for people with diabetes outside of the education session.

These models support Dr. Etzwiler’s premise that patients are the center of any education program and that most patients can become self-managers of their diabetes if provided the context to learn and explore knowledge, skills, and attitudes that affect everyday choices. Although the term “empowerment” was not used at the time and has since been advanced by Funnell et al., it was the essence of Etzwiler’s approach and is core to any education program. Rickheim and the IDC team asked the question: How can we practically and effectively incorporate, apply, and advance patient empowerment in a diabetes education curriculum? Table 4 summarizes how the four models influenced the curriculum.

### A Creative Curriculum

The development team built on the four models, the national diabetes education standards, and years of educational experience and discussions with other educators to guide them in deciding how best to arrange the learning experience. The team needed to have consensus on the overall objective for the curriculum. The objective would set the course for development, serve to keep the process on track, and provide the standard by which the curriculum would be evaluated in practice.

The target audience for the curriculum was newly diagnosed people with type 2 diabetes and those with already-diagnosed type 2 diabetes who had received little self-management education. The objective that guided the curriculum development stated that 90% of patients who completed the program would significantly increase knowledge, significantly improve blood glucose control, and make at least one positive behavior change. The questions for the team became: What do patients really need to achieve the objective? What can we do to ensure the best chance of achieving the objective?

### Uncovering Content

When the development team began its work, many educators, including some on the team, were skeptical of what they saw as a one-size-fits-all approach. Diabetes education, many thought, required one-on-one individual education sessions to meet each patient’s unique needs. There was also a tendency to want to provide excessive amounts of information at initial education sessions because of the fear that patients might not return. Some thought that covering large amounts of content at one visit was the best approach to ensure that all information was transferred. Research, however, shows that this approach can lead to poor understanding of the content, significant lack of retention, and lack of problem-solving skills. The best success comes when educators work to uncover the content through engaging learners in active learning.

Two guiding principles addressed the level and depth of information to be addressed in a session: 1) present only need-to-know information, and 2) allow patients to ask questions to direct discussion toward information that will best address their needs.

### Session Timing

Figure 2 shows the timing and content focus of the four curriculum sessions.

## Table 4. Application of the Theoretical Framework Elements to the BASICS Curriculum Design

<table>
<thead>
<tr>
<th>Framework Element</th>
<th>Application Examples</th>
</tr>
</thead>
</table>
| Adult Learning Theory | • Paced learning through four sessions of successive, need-to-know content  
| | • Adequate time between sessions for practice and experience based on new knowledge  
| | • Timing guidelines for presenting each topic encourage limiting the depth of content and ensure completing the program in the number of hours allotted by Medicare reimbursement rules  
| | • Positive reinforcement and confidence-building through review of blood glucose records, food records, and progress toward goals  
| | • Group sessions and learning activities encourage peer interaction and sharing  
| | • Assessment tools aid individualization  
| | • Teaching tips and techniques help educators create respectful, positive, nonjudgmental, supportive learning atmosphere |
| Transtheoretical (Stages of Change) Model | • Emphasis progresses from knowledge and skills to attitudes and beliefs  
| | • Session-to-session timing maximizes opportunities for successful behavior change, which re-ignites or maintains motivation  
| | • Data self-collected between sessions provide basis for applied teaching and for patient problem-solving, enhancing patient sense of control  
| | • Repetitive learning activities support maintenance |
| Health Belief Model | • Guided discussion gives space for patients to express feelings and concerns  
| | • Each session builds on previous success, increasing patient self-control and problem-solving skills  
| | • Teaching tips and techniques encourage educators to listen to and acknowledge patient concerns and to introduce alternatives and choices |
| Public Health Nursing Model | • Activity and eating strategies help family members who are at risk for type 2 diabetes  
| | • Specific actions (blood glucose testing), tools (record book), and information (benefits of improved control) support making gains in health status  
| | • Teaching tips and techniques help educators promote patient responsibility |
Sessions 1 and 2 are 2 weeks apart, which allows time for patients to practice new behaviors, gain experience, and see results. Based on patient comments and educator observations, most patients come to Session 2 feeling better, more confident, and ready to learn more. Session 3 is held 3 months after Session 1 and serves to remotivate patients in adopting new behaviors, help educators obtain important clinical data, and add to the breadth and depth of knowledge for the patient. Session 4 comes 3 months later, at the point of greatest potential for truly incorporating new behaviors as habits. Reconnecting with the group and the education team to share experiences and work on problem-solving heightens this potential.

Figure 3 highlights the educator’s role in the four sessions. The curriculum provides suggestions for adjusting the basic design to accommodate various needs. Some education programs add an assessment session before Session 1; others add a fifth session between Sessions 2 and 3. Still others move Session 4 closer to Session 3.

Patient Support
Patient education materials are designed to present the curriculum content and incorporate visuals used as teaching aids. Before gathering content together into one book, the educators at IDC had been pulling together packets of information and adding to it when new materials or articles were available. This added unintended complexity to education sessions. If material was given out, it needed to be addressed in some manner, yet much of the information was not necessary at the time. Additionally, some materials did not support the content of other materials. Thus, it became crucial to regain control of the information provided and its timing and to ensure that all materials supported a consistent message.

Patients now receive the BASICS participant book, a blood glucose monitoring record book, “My Food Plan” for carbohydrate counting, and “My Diabetes Success Plan.” One patient who participated in a panel discussion for health professionals likened his BASICS book to a “diabetes bible,” and said he rereads it at least once a year. This example affirms many of the principles of the curriculum’s conceptual framework; learning is a process and needs to be continuously revisited.

Support for Educators
To really make a difference, the curriculum design and execution had to support the needs of educators as well as patients. The team created an applied curriculum that seeks to provide educators with what they need when they need it. Some of the main curriculum elements directed at facilitating the work of educators are:

- Session protocols mapped directly to the patient book
- Visual teaching aids and cues for using them
- Timing guidelines to facilitate the pace and scope of discussion and activities
- Team teaching guidelines to support efficient implementation procedures
- Learning activity ideas to aid educator training, planning, and preparation
- Teaching tips for groups, including techniques for individualization.

![Figure 2. Overview of sessions in Type 2 Diabetes BASICS curriculum. ©2004 International Diabetes Center, Park Nicollet, Minneapolis, Minn.]

![Figure 3. Example of teaching and facilitation tips in Type 2 Diabetes BASICS curriculum. ©2004 International Diabetes Center, Park Nicollet, Minneapolis, Minn.]

<table>
<thead>
<tr>
<th>BASICS Format and Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sessions</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>initial</td>
</tr>
<tr>
<td>3 hrs</td>
</tr>
<tr>
<td>DM Overview</td>
</tr>
<tr>
<td>Carb Counting</td>
</tr>
<tr>
<td>Exercise</td>
</tr>
<tr>
<td>BG monitoring</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Diabetes Success Planning**
teaching meters, and meal planning in groups
- Assessment and data collection tools and cues for using them
- Physician communication strategies and templates.

**Study Proves Group Education Effective**

Once Type 2 Diabetes BASICS was implemented and staff became comfortable facilitating group sessions, Rickheim decided to conduct a randomized study of whether diabetes training using the BASICS curriculum in groups was as effective as its use in individual education. The results upheld the hypothesis that clinical and knowledge outcomes for patients who attended diabetes education in a group setting would be equal to those for patients who had individual education visits.\(^2\) Knowledge increased similarly in both groups. More importantly, both groups had a significant decrease in hemoglobin A\(_1c\) (A1C) (Table 5 and Figure 4). Furthermore, to the surprise of many, the improvement was the same for both group and individual sessions. Group sessions prove to be a more cost-effective method of providing diabetes education (Table 6).

The BASICS program does not emphasize weight loss as a goal, but rather focuses on moderation of carbohydrate intake, choosing healthy foods, and getting moderate activity. Study participants in both groups lost weight.\(^3\) And, since the study, IDC staff have observed that the BASICS curriculum, with its focus on blood glucose control using carbohydrate counting, has the potential to contribute to the promotion of weight loss and in some cases substantial weight loss.

**Building on BASICS**

With the success of the Type 2 Diabetes BASICS curriculum for people with newly diagnosed diabetes and those with little education, it appeared that the basic curriculum design could be applied to other groups of people with diabetes as well as in nontraditional settings. The IDC developed other curriculums using the same guiding principles, and these also have been well received by educators and people with diabetes around the world.

**Insulin BASICS**

Key questions addressed before developing Insulin BASICS included: Was there a way to standardize the maze associated with insulin education? Could a single insulin curriculum address the needs of newly diagnosed type 1 diabetic patients, type 2 diabetic patients starting insulin, type 2 diabetic patients moving from oral agents to insulin, and patients on insulin who need a new regimen? Furthermore, would the group education model work for patients taking insulin?

The development of Insulin BASICS,\(^4\) like its type 2 counterpart, resulted from a long process of practice-based testing. It became clear early on that one-on-one visits were most effective for insulin initiation and the 1-week follow-up visit. The development team strived to keep an open mind about new approaches and venues to best support learning and future application of curriculum content and was not opposed to trying variations of standard education procedures.

Insulin BASICS can be used as a guide to educate anyone who requires insulin. Icons are used to help guide educators through the content based on patient needs. Practice-based teaching tips and content specific to the needs of newly diagnosed patients, those needing insulin adjustment, or those with type 2 diabetes needing insulin appear throughout the curriculum. As with Type 2 Diabetes BASICS, it is a valuable resource providing health professionals with a book of content for all sessions, along with examples, application practice, and resource material.

**Gestational Diabetes BASICS**

As educators at the IDC continued to look across all patient education programs, education for gestational diabetes mellitus (GDM) emerged as the next place of need. Certain elements of the type 2 diabetes and insulin curriculums were applicable to GDM patients, but neither was exactly the right fit for the acute, intensified nature of GDM management.

GDM patients need education that focuses on short-term results with sessions that focus on individualized problem solving to achieve optimal outcomes for both mothers and babies. The curriculum and patient materials for Gestational Diabetes BASICS needed to include the basics of treatment and self-management, including medical nutrition therapy (MNT), individualized food planning, and blood glucose self-testing, with separate education modules for patients also needing diabetes medication. Curriculum developers also included unique treatment algorithms for initiating and advancing therapy using MNT.
alone, MNT with glyburide, and MNT with insulin.

The curriculum\textsuperscript{22} outlines content and provides tips for leading discussions about best care. Patients with GDM receive a Gestational Diabetes BASICS book and “My Food Plan for Gestational Diabetes” for carbohydrate counting. The patient book addresses not only prenatal care, but also care after delivery. It includes a risk assessment; nutrition, activity, and life balance self-tests; and information about how to make improvements, as needed, in each of these areas to prevent/delay the development of type 2 diabetes.

**BASICS in the workplace**

A recent review of work site health issues identified diabetes as the third most costly of physical and mental health conditions affecting work productivity.\textsuperscript{21} Two potentially related conditions (angina pectoris and hypertension) were ranked first and second. The authors highlighted that these medical conditions can be addressed through work site education programs. They reviewed a health and productivity management model that considers employees as a business investment that needs to be well managed. Implementing work site health programs allows organizations to more fully benefit from human assets and to reduce their health and productivity costs.

In response to this and similar research, a St. Paul, Minn.–based, self-insured Fortune 500 company decided to address the ever-rising employee health care costs related to diabetes. The company and the IDC agreed to have the IDC pilot a diabetes self-management education program at the worksite with the goal of improving clinical and work-related outcomes. Principal investigator Jennifer Robinett Hokanson, RN, CDE, and her colleagues at the IDC were confident that they could deliver Type 2 Diabetes BASICS in the workplace just as effectively as in a clinic and with similar outcomes, yet they decided to investigate the question in a research study.

The study team enrolled 49 participants with type 2 diabetes in a 20-week, four-session Type 2 Diabetes BASICS program. Investigators collected baseline and postintervention data, including A1C results, knowledge, “presenteeism,” and productivity.

Presenteeism is a concept in the field of work site health promotion. Unlike traditional measures such as absenteeism, presenteeism acknowledges that employees, although physically present at a job, may still experience decreased productivity or quality of work because of health concerns. It has been reported that on-the-job productivity loss related to illness or medical condition can reduce one’s work capacity by one-third or more.\textsuperscript{24} An article in the *Harvard Business Journal* noted that cost estimates for this reduction in productivity “costs companies billions of dollars a year. Emerging evidence suggests that relatively small investments in screening, treatment, and education can reap substantial productivity gains.”\textsuperscript{25} The Stanford Presenteeism Scale is a new instrument that was used in this study and is measured as a Work Impairment Score.\textsuperscript{23} Normal values range from a score of 0, indicating no impairment, to 100, indicating complete impairment. A high Work Impairment Score indicates low levels of presenteeism.

The study results showed that both glycemic control and knowledge test scores improved significantly by the end of the program.\textsuperscript{26} The percentage of participants with an A1C result > 9% decreased from 15% at baseline to 0% at program end. Although there were no significant changes noted in presenteeism and productivity, participants did state a preference for receiving education at the worksite as opposed to in a usual clinic setting. Furthermore, they were more likely to finish all education sessions than participants in a clinical comparator group. This evidence supports our other research and experience that those who complete Type 2 Diabetes BASICS improve knowledge and clinical outcomes, as well as selected behavior change.

A worksite diabetes coaching study currently in progress in the Detroit, Mich., area was also designed to meet the needs of employees who wished to improve their diabetes care without leaving work to attend education visits (R.P. Austin, unpublished observations). This coaching study is using the BASICS program’s “My Diabetes Success Plan”\textsuperscript{14} to guide discussions and set goals, and the Type 2 Diabetes BASICS Pre/Post Knowledge Test\textsuperscript{27} to document knowledge at baseline and at the end of the study. The four-session, one-on-one coaching program is a collaboration among the world headquarters of a major manufactur-

### Table 6. Group Education Requires Less Time Than Individual Education With Same A1C Reduction

<table>
<thead>
<tr>
<th>Session</th>
<th>Length of group session (hours)</th>
<th>Educators’ hours for six patients*</th>
<th>Hours for each individual session</th>
<th>Educator’s hours for six visits†</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>1.5</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>1.5</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total educators hours to provide four sessions of Type 2 Diabetes BASICS</td>
<td>16</td>
<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

*Two educators participate in the entire group session (facilitating/coaching, reviewing records, individualizing recommendations, charting)
†Two educators divide time for each session. Either 60 minutes (total 2 hours) or 30 minutes (total 1 hour) each for dietitian and nurse

Note: Based on Type 2 Diabetes BASICS curriculum.\textsuperscript{2} Group and individual sessions resulted in a 2% decrease in A1C at third session and sustained at fourth session; mean A1C 6.5%.\textsuperscript{20}
er, a large medical group, and a health maintenance health plan. Such efforts have the potential of greatly affecting diabetes care.28

These research projects offered education programs free to participants. A focus group of employees at a large university setting indicated that they would attend diabetes education sessions but did not want to pay a nominal fee ($5–10 per session) for them.29 Employers will need to balance the costs of such programs with the potential savings from increased productivity, decreased sick days, and lower health care costs related to improved glycemic control.

Challenges of Group Education
Although the BASICS program has been used successfully by a variety of educators in individual and group settings, group education presents certain challenges. We have identified three primary challenges to group education.

Government regulations and confidentiality
Health Insurance Portability and Accountability Act (HIPAA) regulations require health organizations to keep all medical information confidential unless patients provide consent to share their personal information. This information includes medication use and dosage, laboratory values, and self-monitoring of blood glucose results. In the past, this type of information was discussed in classroom settings and even used for teaching purposes. Now, to address this challenge, patients are informed that such information is confidential and that they do not need to share it.

The BASICS curriculum suggests that the nurse and dietitian each spend a few minutes at the beginning of an education session meeting privately with individual participants. Then, while one educator is facilitating the group, the other can review food and blood glucose records. These activities allow the educator to identify individual issues or situations about which participants might have questions or need guidance. The educator needs to respect the confidentiality of such information. Educators can lead a discussion about a topic and give general examples but should avoid any that would identify anyone in the group.

Examples of maintaining confidentiality while meeting individual needs include:

- A patient during check-in states she is frustrated finding an activity that fits her schedule. The educator can ensure that there is discussion about activity options during the session.
- A patient’s food record shows consistent miscounting of carbohydrates in pasta and rice. The educator can use pasta and rice as examples when discussing carb counting in the group.

In both of these scenarios, the educator is able to meet individual learning needs through the group process while maintaining confidentiality.

In the BASICS curriculum, additional tips are provided for adhering to HIPAA guidelines and maintaining confidentiality while individualizing education. These include writing private notes directly on food records or log books and using sticky notes to give laboratory value results rather than announcing to the entire group. Individualized notes are written to suggest changes to the patient and reminders for implementation. These types of notes are balanced with positive notes that reinforce behaviors and choices that contribute to a healthy lifestyle and positive clinical outcomes.

Medicare time requirements
The Centers for Medicare and Medicaid Services (CMS) encourages group education for diabetes self-management training (DSMT) and sets limits on the number of hours that will be reimbursed for DSMT. Ten hours are allowed the 1st year (12 months from the first education session). The BASICS four-session curriculum is billable for 8 hours and helps educators meet this requirement.

Although research20,26 shows the effectiveness of the four sessions, sometimes it is necessary to do a separate individual assessment (CMS allows 1 of the 10 hours to be an individual session) or an additional group session. The 2 hours that remain after the BASICS program can be used for these purposes or for continued follow-up if a patient, for example, needs a diabetes medication change or starts a medication that will interfere with blood glucose management.

Medicare patients also have access to 3 hours of MNT for diabetes within the 1st calendar year of education and then 2 hours per year after that. BASICS is a comprehensive education program and includes MNT, which is billable within the 10 hours CMS allows for DSMT. If a patient needs additional nutrition counseling, the diabetes MNT hours would still be available.

Educator-facilitator training
Many educators are most comfortable providing information and delivering a predetermined knowledge set. Groups, however, allow patients to be active participants in the learning process by raising questions and learning from their peers. This process is quite powerful, yet it can be challenging to facilitate a group discussion while trying to stay on time and focused on the objectives. Not only can participant questions or comments be distracting, some participants may want to talk too much or not at all or may bring up unrelated topics or want to go deeper into a topic than other participants need or desire.

To address this challenge, the BASICS curriculum provides methods for engaging groups with questions, activities, and examples. It also guides educators about how a group might react to a specific topic and provides suggestions for a variety of responses. Additionally, the IDC offers a BASICS professional training program that addresses how to be comfortable as a facilitator, and most communities offer specific training on facilitation that could be helpful to educators looking for more information and experience.

Conclusion
The IDC philosophy of diabetes education, as originally promoted by Dr. Etzwiler, has allowed center staff to explore, challenge, and evaluate best practices and keep patients at the center of diabetes education and care. The BASICS curriculum family is an example of the kind of patient-centered innovation that Dr. Etzwiler championed in his own work and inspired in others.

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