Guidelines for the Practice of Diabetes Education
AADE Guidelines for the Practice of Diabetes Self-Management Education and Training (DSME/T)


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Foreword

The American Association of Diabetes Educators (AADE) is a multidisciplinary professional association dedicated to providing diabetes educators with the tools, training, and support necessary to help patients change their behavior and accomplish their diabetes self-management goals. AADE is constantly working towards its vision of successful self-management for all people with diabetes and related conditions. With that vision in mind, AADE sets the scope and direction for the practice of diabetes education to promote healthy living through self-management of diabetes and related conditions.

The AADE Guidelines for the Practice of Diabetes Self-Management Education and Training (DSME/T) set forth in this document describe the implementation of The Scope of Practice, Standards of Practice and Standards of Professional Performance for Diabetes Educators. These guidelines support the delivery of DSME/T within the framework of the AADE7™ Self-Care Behaviors and The National Standards for Diabetes Self-Management Education. The roles and responsibilities delineated in these AADE guidelines can be used by individuals and organizations involved in the facilitation and delivery of diabetes education and care for persons with or at risk for diabetes and their families/caregivers.
DSME/T practice is further described by the American Diabetes Association’s Clinical Practice Recommendations and AADE’s Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators. The “Scope and Standards” is intended to distinguish diabetes education as a distinct health care specialty, promote DSME/T as an integral part of diabetes care, and facilitate excellence in DSME/T.

Introduction

Diabetes self-management education and training (DSME/T) is a collaborative process through which people with or at risk for diabetes gain the knowledge and skills needed to modify their behavior and successfully self-manage the disease and its related conditions. The theory underlying the AADE7™ Self-Care Behaviors framework is one in which DSME/T is culturally appropriate and empowers patients to achieve optimal health status, attain a better quality of life, and reduce the need for costly health care. Clinical practice recommendations underlie the AADE7 framework. Recognizing the value of this intervention, one of the goals of the Healthy People 2010 initiative is to increase the percentage of individuals who receive DSME/T from 40% in 1998 to 60% by 2010.

DSME/T has been shown to be particularly supportive when clinicians interact collaboratively with patients in developing a plan of care that considers the clinician’s expertise and the concerns and priorities of the patient. The collaborative role operates to empower patients who are able to understand what to expect from their health care and what is expected of them—including being fully cognizant of risk-reducing activities. Through this understanding, patients gain a sense of empowerment in managing their health condition.

Facilitating positive self-care behaviors directed at successful diabetes self-management was formally adopted as a desired outcome of DSME/T in 2002. Seven specific self-care behaviors developed by the American Association of Diabetes Educators (AADE), known collectively as the AADE7™, have been defined to guide the process of DSME/T and help patients achieve behavior change. The field has been further advanced by blending the AADE7™ behavior change construct with findings from the Diabetes Attitudes, Wishes and Needs (DAWN) study which highlights the importance of provider-patient collaboration and access to care.

Diabetes prevention, treatment, education, and support is most effectively provided by multi-disciplinary teams. AADE further recognizes that DSME/T is delivered by multiple providers who function at different levels and in different roles. Hence, there is a need to clarify the roles/responsibilities of all persons involved in the facilitation and/or delivery of diabetes education and care across a continuum of clinical- and community-based settings.

Scope, Purpose, and Use of these Guidelines

This document expands on the standards and training curricula developed by the AADE, including The Scope of Practice, Standards of Practice, and Standards of Professional Performance Guidelines for Diabetes Educators.
This expansion is aimed at facilitating implementation of the AADE7™ Self-Care Behaviors framework in the delivery of DSME/T and empowering patients to change behavior and achieve success in self-management.

The purpose of these guidelines is to increase access to DSME/T and achieve better patient care by:

1. Delineating the roles of the multiple levels of diabetes educators

2. Suggesting a career path for diabetes educators

3. Clarifying the contribution that can be made by individuals who have the knowledge, capability, diversity and language skills needed to address diabetes self-management and support in a variety of settings.

It is beyond the scope of these guidelines to address the range of activities that diabetes care practitioners may be educated and authorized to perform based on facility and organizational policies, bylaws, and clinical privileging; state practice acts; and state occupational supervision regulations.

**Who Should Use these Guidelines?**

The roles and responsibilities delineated in this document are intended for use by all individuals and organizations involved in the facilitation and delivery of diabetes education and care for all persons with diabetes and their families/caregivers. The list of target users includes, but is not limited to: diabetes educators and other health care providers, health care payers and policy makers, voluntary health organizations, businesses, professional associations, governmental and non-governmental agencies, and other stakeholders.

**Implementation and Criteria for Monitoring the Use of these Guidelines**

To be successful in advancing the delivery of DSME/T, strategies are needed to help ensure effective implementation of the various recommendations set forth in the guidelines. Tools have been developed to support implementation (see the following section), and an ongoing outreach campaign will inform diabetes educators and the broader health care community about the guidelines’ availability and intent. AADE will track the adoption and use of these guidelines via its bi-annual National Practice Survey and through interface with AADE members.

AADE will monitor the usage of these guidelines and reserves the right to make changes in these guidelines without prior notice. Monitoring criteria include the frequency in which the guidelines are cited in the literature and usage rates of these guidelines among health care practitioners.

**Tools to Support Implementation of the Guidelines**

An electronic database has been created to monitor behavioral goal setting and implementation of diabetes education by practitioners at the various practice levels. The AADE7™ system tools, which are available for
Voluntary use, capture quality indicators based on the AADE™ clinical and behavioral outcomes. Reports generated by the system help to track practitioner and patient DSME/T activities and assess the achievement of collaboratively set goals and changes in clinical and behavioral outcomes that result in better health for people with diabetes.

The guidelines are intended to be used in conjunction with the AADE Competencies and Skills for Diabetes Educators, which provide a comprehensive description of the knowledge, skills, and competencies necessary for the delivery of diabetes education and care at various practice levels. In addition, AADE has developed a desk reference for diabetes self-management and collaborated with other groups to develop the National Standards for DSME/T. Electronic and print materials were developed to support the practice of diabetes education such as a monograph on continuous quality improvement and published systematic reviews on each of the healthy behaviors.

Methodology for Guidelines Development

The guidelines were developed by a volunteer writing group composed of diabetes care professionals with diverse educational backgrounds and various credentials representing all regions of the United States. The AADE Professional Practice Committee (PPC) provided oversight for the development and review process. The PPC is a technical committee consisting of 10 volunteers who provide technical advice, review, and input on a variety of issues relating to the practice of diabetes education. The PPC develops official AADE documents that articulate the association’s views and mission, reflect current evidence, delineate standards of care, and support the AADE™.

The writing group met in person two times to review and consider the published evidence, define the purpose of the guidelines, create the construct underlying the roles described herein, and discuss barriers to the adoption of the guidelines.

The guidelines have been critiqued and vetted by target users. Reviewers from diverse backgrounds and practice perspectives provided critiques at various points during the development process. The reviewers included individuals who are active in the practice of diabetes education for self-care, as well as representatives from nongovernment organizations, academic centers, consulting firms, and public health groups. The reviewers were asked to use the Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument, which was modified slightly to better suit the purpose of this review. Comments from the external reviewers were considered by the AADE PPC, shared with the writing team, and integrated into the final version of the document.

Practice Questions

As a basis for developing the recommendations set forth in these guidelines, the writing group addressed five questions relevant to the role and importance of diabetes education and training in the self-management of diabetes:
1. Does diabetes self-management education and training improve outcomes?

2. What is the framework for diabetes self-management education and training education?

3. What is the process for implementing diabetes self-management education and training?

4. Who should deliver diabetes self-management education and training to persons with diabetes?

5. What are the unique roles and responsibilities of those who deliver diabetes self-management education and training for self-care?

The evidence (i.e., scientific evidence published in the literature) supporting the recommendations is shown as evidence statements, with grading levels for the evidence indicated at the end of each statement.

**Role of Scientific Evidence in the Development of the Guidelines**

Evidence-based clinical practice guidelines enhance the ability of health care providers to effectively address the needs of individuals with diabetes. The guidelines set forth in this document are evidence-based, and each piece of evidence is graded according to specific criteria. The grade for each piece of evidence used to develop this document is indicated at the end of each citation in the reference section. The evidence analysis inclusion criteria included studies conducted and published since 1984, documents relating to the practice of diabetes education published by professional organizations, DSME/T-related published manuscripts, peer-reviewed journals, articles, and relevant guidelines.

Steps were taken to determine the strength and quality of the specific studies and documents upon which the guidelines were crafted. Initially, the PPC considered the breadth of literature available. With this guidance, AADE staff systematically conducted literature reviews, seeking high-quality research (e.g., randomized controlled trials, meta-analyses and well-conducted quasi-experimental studies), consensus documents, and published standards of care and practice.

As the next step, the AADE PPC recommended published studies and documents that would serve as the foundation for development of the guidelines and recommended to the writing team papers that were widely cited (i.e., in more than 30 published documents) and deemed (based on their expert opinion) to be “embraced” by those who undertake the practice of DSME/T and are substantially influential to the field. These materials were provided to the writing team prior to their initial meeting. The AADE Research Committee advised on how the quality of specific studies and documents would impact the graded rating of the questions.

The evidence used in developing the guidelines included key meta-analyses, evidence-based reviews, clinical trials, cohort studies, epidemiologic studies, position statements, and consensus statements and guidelines (English
language only). The methods and process used for evidence gathering, development of the guidelines, and the subsequent review process are described below.

The writing group obtained relevant reports through a computerized search of the literature using PubMed and other search engines; reports also were obtained by scanning incoming journals in medical libraries and reviewing references in pertinent review articles, major textbooks, and syllabi from national and international meetings on diabetes subjects using relevant titles and text words (e.g., diabetes self-management, education, training, behavior change). The defined search terms varied only to reflect each of the specific self-care behaviors. An electronic database was created to include full reference information for each report; abstracts for most of the reports were included in the database. In total, 1,621 reports were identified. A review of recent guidelines, position statements, and articles not identified in the universal search also was conducted to obtain additional information that was potentially relevant to the questions. Key reports, whether supportive or not, were included and summarized based on their relevance to the practice questions addressed in the guidelines. Evidence relating to diabetes self-management, education, and training was reviewed, graded, and cited as appropriate in this document.

Grading of Evidence

The AADE Research Committee graded the evidence cited to support the recommendations. This committee provides technical advice regarding matters of research (behavior, clinical, and other) and any other question pertaining to research as requested to support DSME/T. The development of the guidelines was driven by the strength of the evidence and revised to accurately reflect the recent science and body of knowledge.

Two members of the Research Committee graded each piece of evidence according to criteria presented in Table 1. Whenever possible, practice recommendations were assigned a letter grade (A-D) based on the level of scientific substantiation. An A grade is the strongest recommendation, indicating that the evidence derives from a methodically robust study, typically a randomized control trial (RCT) or a very high-quality quasi-experimental study. The AADE Research Committee noted that not all RCTs necessarily provide level 1 evidence. Rather, in some instances, RCTs could be level 2 or 3 if they were poorly executed or used inappropriate methodology. A grade of D indicates evidence that is built on consensus.

The following evidence grading process was used:

1. AADE posted all relevant articles to be graded—along with the criteria, score sheet, and guidelines—on a Web-based document sharing system.
2. Two evidence graders from the AADE Research Committee were assigned to each paper. If they agreed on a level of evidence (e.g., level 1), the work was considered done and the agreed-upon grade assigned. If they disagreed, a third grader was invited to grade the evidence and serve as a “tie breaker.”
3. Reviewers posted their grades to the score sheet document in the Web-based document sharing system.
4. The grades were provided to the writing team and were included in the reference section of the guidelines.
Finally, the quality and validity of the draft guidelines document was assessed by six reviewers using the AGREE instrument, which was modified to accommodate the intent of the guidelines. Reviewers then recommended adoption of the guidelines.

**Table 1. Criteria for Rating Evidence and Grading Recommendations**

**EVIDENCE RATING:**

<table>
<thead>
<tr>
<th>Level-of-Evidence Category</th>
<th>Study Design or Information Type</th>
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<tbody>
<tr>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td></td>
<td>• Randomized controlled trial with rigorous methodology</td>
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<td></td>
<td>• Multicenter trial with rigorous methodology</td>
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<td></td>
<td>• Large meta-analysis with quality ratings</td>
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<td></td>
<td>• Quasi-experimental study with control group</td>
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<td></td>
<td><strong>2</strong></td>
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<tr>
<td></td>
<td>• Randomized controlled trial</td>
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<td>• Prospective cohort study</td>
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<td>• Meta-analyses of cohort study</td>
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<td>• Case-control study</td>
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<td><strong>3</strong></td>
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<tr>
<td></td>
<td>• Methodologically flawed randomized controlled trial</td>
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<td></td>
<td>• Nonrandomized controlled trial</td>
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<td></td>
<td>• Observational study</td>
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<td></td>
<td>• Case series or case report</td>
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**Summary of Recommendations**

- All patients with diabetes should have access to diabetes self-management education and training. (A)
• Diabetes self-management education and training should focus primarily on supporting behaviors that promote effective self-management as described in the AADE™ Self-Care Behaviors. (B)

• Diabetes self-management education and training should follow a comprehensive 5-step process that includes: assessment, goal-setting, planning, implementation, and evaluation. (C)

• Diabetes self-management education and training should be delivered by individuals who are prepared and competent. (A)

• People who deliver diabetes education and care services should function within the practice level articulated in these guidelines. (D)

Diabetes Self-Management Education/Training: Background

An estimated 24 million Americans have diabetes. Of these individuals, approximately 18 million have been diagnosed with the disease, while 6 million are unaware that they have diabetes. The highest prevalence of diagnosed and undiagnosed diabetes occurs among Native Americans, African Americans, and Hispanics.

Poorly controlled diabetes leads to complications such as macrovascular disease, retinopathy, neuropathy, nephropathy, and lower extremity amputations. Macrovascular complications are the leading cause of death in persons with diabetes. The annual direct and indirect costs associated with diabetes and its complications are estimated to be $174 billion.

Large controlled clinical trials have demonstrated that intensive treatment of diabetes can significantly decrease the development and/or progression of the complications of diabetes. Recent studies by Gaede and colleagues clearly demonstrated that intensive management of all risk factors, including lipids, blood pressure, and glycemia, had significant beneficial effects on cardiovascular-related deaths. This intensive therapy also was found to be cost-effective in primary practice settings.

Management of diabetes is predominantly self-directed, in that individuals are responsible for the day-to-day decisions related to controlling their disease. Effective management requires patients to understand and use multiple technologies for glucose monitoring and medication administration as well as complex treatment strategies and problem-solving skills.

Approximately 90% of diabetes care is delivered by primary care providers (PCPs), often without the involvement of a qualified diabetes educator. Although DSME/T is recognized as a crucial component in diabetes care, many
patients never receive formal training. On average, only 14.3% of all diabetes-related primary care visits include diet or nutrition counseling, 10% include exercise counseling, and 3.6% include weight reduction counseling. PCPs may only provide advice on risk reduction rather than training in diabetes self-management; therefore, patients may only receive information about diabetes care without receiving the education and skills training they need to effectively manage their diabetes.

Use of the term DSME/T has evolved over the years. For a summary of the rationale and evolution of this term, see Table 2.

Table 2. Evolution of the Term “Diabetes Self-Management Education/Training” (DSME/T)

- The diabetes education process has been called diabetes self-management education (DSME).
- DSME is the official term used in the National Standards for Diabetes Self-Management Education and in other important materials (e.g., *The Art and Science of Diabetes Self-Management Education: A Desk Reference for Healthcare Professionals*, American Association of Diabetes Educators; 2006).
- Diabetes self-management training (DSMT) is the official terminology used by the Centers for Medical and Medicaid Services (CMS).
- In reality, diabetes educators provide more than training—they provide “education.” Because CMS and some other payers reimburse only for “training” and are unwilling to pay for “education,” AADE embraces both terms to reflect the accuracy of what is provided to the patient along with the pragmatism required by payer coverage and reimbursement policies.

DSME/T Practice Questions

*Practice Question 1: Does diabetes self-management education and training improve outcomes?*

DSME/T is recognized as an integral component of effective diabetes management. A large body of evidence supports the effectiveness of DSME/T in improving diabetes outcomes. A recent meta-analysis showed that patients who received self-management education in a group setting improved their diabetes knowledge and reduced their fasting blood glucose levels, hemoglobin A1C (A1C) levels, systolic blood pressure levels, and body weight, thus reducing their need for diabetes medication.

A systematic review of 71 trials by Warsi and colleagues also showed reductions in A1C and systolic blood pressure in patients who received formal training in diabetes self-management. In addition, Norris and colleagues
demonstrated that self-management education improves glycated hemoglobin (GHb) levels at immediate follow up, and that increased contact time is associated with an increased effect.

Positive outcomes are linked to DSME/T that focuses on self-management, emphasizes behavioral strategies, and provides culturally relevant information. Models that encourage active engagement of patients and build self-efficacy have been shown to increase the effectiveness of self-management skills and improve outcomes. Norris and colleagues found evidence that supports the effectiveness of self-management training for people with type 2 diabetes.

Brown and colleagues demonstrated that culturally competent self-management education, in both individual and support group settings, improved health outcomes in Mexican-Americans, particularly those with an A1C level under 10%. Similar benefits have been achieved when the educational intervention included face-to-face delivery, a cognitive reframing teaching method, and exercise content.

A study by Piatt and colleagues showed that DSME/T, when implemented within the context of the Chronic Care Model, improved clinical and behavioral outcomes in an underserved community.

Although analyses of the cost-effectiveness of DSME/T are ongoing, a number of studies have reported findings that strongly support cost reduction as a benefit of diabetes education.

**Practice Question 2: What is the framework for diabetes education?**

Traditionally, DSME/T has been perceived and applied as a “content-focused” activity. Within this paradigm, diabetes educators use primarily didactic presentations to transfer to patients information about diabetes, diabetes treatments, and necessary lifestyle modifications. Little or no emphasis was placed on addressing or achieving the behavioral changes needed to make those modifications.

New theories and findings have helped to transition DSME/T toward patient-provider interactions that are focused on patient concerns, and in which the patient is listened to and helped to work through issues. These interactions result in greater patient satisfaction than do those in which the provider does most of the talking and gives directions. A review by Glasgow and colleagues showed that patients who feel understood and supported by their providers are more likely to have high levels of self-confidence and to succeed at behavior change. This report also documented that improved patient-provider communication and increased involvement of patients in decision-making are associated with improved behavioral, biological, and quality-of-life outcomes. In addition, diabetes educators are moving beyond a behavioral focus to integrate patient empowerment and psychosocial strategies into the AADE7™ Self-Care Behaviors construct.
AADE7™ Self-Care Behaviors

A workgroup of diabetes educators identified 7 self-care behaviors that are essential for successful and effective diabetes self-management by mapping the 15 content areas of the 1995 National Standards for Diabetes Self-Management Education and by reviewing the literature and expert consensus. Today, these 7 self-care behaviors (AADE7™) are incorporated into the National Standards for Diabetes Self-Management Education. They include: (1) healthy eating; (2) being active; (3) monitoring; (4) taking medication; (5) problem solving; (6) healthy coping; and (7) reducing risks. Systematic reviews of the evidence supporting these behaviors were undertaken in 2007.

Health eating. There is now good evidence to show the benefits of healthy eating for people with diabetes. These include: improvement in glycemic control and lipid profiles, maintenance of blood pressure in the target range, and weight loss or maintenance. Because there is no one set of nutrition recommendations or intervention that apply to all persons with diabetes, AADE believes nutrition and education should begin with an assessment of each individual’s current eating habits and preferences. Then, in collaboration with the individual, the appropriate nutrition education program and goals should be determined. The healthy eating self-care behavior is addressed by two distinct, but interrelated healthcare services, DSME/T and medical nutritional therapy (MNT). The emphasis of nutrition education, not MNT, serves as the basis for the health eating self-care behaviors in the DSME/T program.

Being active. Exercise is important in both type 1 and type 2 diabetes. For persons with type 2 diabetes, engaging in regular exercise may improve glycemic control and reduce the risk of microvascular and macrovascular complications, increase insulin sensitivity, reduce stress and depression, contribute to weight loss/maintenance, and contribute to control of lipids and blood pressure, thereby reducing the risk of cardiovascular disease, which is the leading cause of death in persons with diabetes.

Patients with type 1 diabetes also can benefit from regularly engaging in exercise or physical activity. Outcomes from exercise among type 1 diabetes patients may include: potential improvements in glycemic control (although findings on this outcome are mixed); reduction in the risk of cardiovascular disease; improvements in lipid profile and blood pressure; improvement in endothelial function (a marker for cardiovascular event risk); improvement in insulin sensitivity; and reduction of weight. Studies are needed to identify the most effective interventions regarding physical activity. However, current evidence strongly supports the benefits of becoming and remaining physically active as a component of diabetes management.

Monitoring. Self-monitoring may include such assessments as blood glucose levels, blood pressure, foot checks, steps walked, weight, and achievement of goals.
Self-monitoring behaviors aim to prevent or slow the progression of diabetes complications. Information and instruction on self-monitoring for foot care will promote self-care and reduce complications. Blood pressure monitoring is effective in detecting and helping to control hypertension, which is a major risk factor for cardiovascular and cerebral vascular disease and microvascular complications.

Self-monitoring of blood glucose (SMBG) is a tool that guides glycemic management strategies and has the potential to improve problem-solving and decision-making skills for persons with diabetes and their health care providers. SMBG can promote improved understanding of the impact of foods, physical activity, and medications on blood glucose levels. It can facilitate more timely adjustment of therapeutic regimens, and support flexibility in meal planning, physical activity, and medication administration.

Recommendations for use of SMBG in type 1 diabetes are clearly defined by various medical organizations. SMBG is also particularly valuable in pregnancy; as intensive glycemic control during pregnancy has been shown to significantly benefit fetal outcomes. Although results from randomized clinical trials assessing the impact of SMBG in non-insulin-treated individuals have been mixed, a large number of observational trials have revealed a strong association between SMBG and improved diabetes outcomes. Health care providers should encourage individuals with diabetes to use SMBG.

**Taking medication.** The value of pharmacologic therapy in achieving and maintaining diabetes control has been clearly established. In addition to investigating pharmacotherapy and improved A1C, well-designed trials have explored the benefit of pharmacologic therapy in improving avoidable and costly microvascular and macrovascular outcomes of diabetes.

Among patients who require pharmacologic therapy, adherence is essential for optimal diabetes outcomes and control. Reports characterizing common barriers to using diabetes medications have linked worse diabetes care outcomes to poor diabetes medication adherence. The most commonly cited factors for non-adherence to medication therapy include: regimen complexity (e.g., need to split tablets, mix products), dosing frequency greater than twice daily, cost, lack of self-confidence, lack of education about the use of the product, depression, and presence or fear of adverse effects. In an informal survey of diabetes educators in 2005, patient resistance and fear, weight gain, inconvenience, physician resistance, inadequate support, and cost were among factors suggested as barriers to using insulin. Diabetes educators are in a key position to promote medication-taking by (1) identifying potential barriers to medication adherence; (2) facilitating strategies to overcome barriers; and (3) providing follow-up assessment to ensure the ongoing medication-taking ability for patients.

**Problem solving.** Problem solving is a strategy that has been used in DSME/T to facilitate patients' attainment of each of the other self-management behaviors (healthy eating, being active, taking medications, monitoring, healthy coping, and reducing risks). Within the AADE core outcomes framework, problem solving is defined as "a learned
behavior that includes generating a set of potential strategies for problem resolution, selecting the most appropriate strategy, applying the strategy, and evaluating the effectiveness of the strategy.”

Problem solving is most commonly characterized as involving a sequence of rational steps, and it is recognized as a core component of effective diabetes self-management.

A systematic review of problem solving in diabetes highlighted the complexity of problem solving, noting that it is a multidimensional concept. This review, used in developing these guidelines, yielded a small-to-moderate body of recent work addressing problem solving as a component of DSME/T. Few studies have actually included general measures of problem solving as part of diabetes education interventions. However, a number of studies, including one by Glasgow and colleagues, assessed problem solving in response to hypothetical problem situations and found that an “increase in problem-solving was a partial mediator of outcomes”.

Studies applying problem solving to specific self-management behaviors are most often associated with findings of problem solving as necessary and robust. Some evidence associates low levels of problem solving with poor glycemic outcomes. Less clear are associations of problem solving skills with other metabolic parameters such as lipids or blood pressure. Overall, the evidence suggests that problem solving training may be an effective intervention tool for select outcomes. More studies are needed to elucidate mechanisms of action and optimal approaches to standardizing assessment and intervention.

**Healthy coping.** Health status and quality of life are affected by cognitive, emotional, social, and situational factors. Psychological distress may directly affect physiological aspects of health and indirectly influence a person’s thoughts, motivation to keep his or her diabetes in control, and health care behaviors. When motivation is dampened, the commitment to and behavioral steps required for effective self-care are difficult to maintain. When barriers seem insurmountable, good intentions alone cannot sustain the behavior. Coping efforts may become difficult and, in turn, a person's ability to self-manage his or her diabetes may deteriorate.

A systematic review of the literature on coping, negative emotions, and diabetes management by Fisher and colleagues identified a number of well-controlled studies that evaluated cognitive-behavioral treatment of depression, coping/problem-solving interventions, support groups, and cognitive analytical therapy. While the diversity of intervention approaches limits understanding of the most optimal interventions to improve healthy coping, as a whole, the body of research supports the positive impact of coping interventions on quality of life in people with diabetes. The literature also has demonstrated the benefits of interventions to promote healthy coping on metabolic control.

Thus, an important part of the diabetes educator’s work is identifying: (1) the patient’s thoughts regarding living with diabetes; (2) the patient’s motivation to change behavior; (3) the presence and intensity of negative emotions;
and (4) the social/situational barriers to and facilitators of optimal self-care. Once these are identified, the diabetes educator helps in setting realistic and achievable behavioral goals and guiding the patient through multiple obstacles.

Reducing risks. Reducing risks is defined as implementing effective risk reduction behaviors to prevent or slow the progression of diabetes complications. Diabetes care processes and outcomes have improved over the past 10 years, but in one study, only approximately 7% of persons with diabetes have achieved established goals for glycemic control, blood pressure, and lipids.

The AADE7™ framework defines the following skills to be taught to people with diabetes as interventions that reduce diabetes complications and maximize health and quality of life: smoking cessation, foot checks, blood pressure monitoring, self-monitoring of blood glucose, maintenance of personal care records, and regular eye, foot, and dental examinations. Addressing these behaviors is supported by other medical organizations.

Role of the AADE7™ Framework in DSME/T

The AADE7™ Self-Care Behaviors support a paradigm shift in diabetes education from a content-driven practice to an outcomes-driven practice, providing an evidence-based framework for assessment, intervention, and outcomes (evaluation) measurement of the diabetes patient, the DSME/T program, and populations. Through use of the AADE7™ Self-Care Behaviors, educators are able to determine their effectiveness with individuals and populations, compare their performance with established benchmarks, and measure and quantify the unique contribution that DSME/T makes in the overall context of diabetes care. Peeples and colleagues have developed a schematic of the DSME/T outcomes continuum, delineating the process through which addressing change in the 7 self-care behaviors promotes clinical improvement and improved health status.

Practice Question 3: What is the process for implementing diabetes education?

Implementation of DSME/T involves five defined steps: (1) assessment; (2) goal setting; (3) planning; (4) implementation; and 5) evaluation/monitoring. These steps are described as follows (additional provider-level information is presented in Table 3):

Assessment

The first step in the DSME/T process is performing an assessment, which requires ongoing collection and interpretation of relevant data. The extent of the education assessment is dependent upon the skill level of the DSME/T provider (Table 3). The diabetes educator collects assessment data in a systematic and organized fashion from the patient and, as appropriate, from family members, members of the patient's social support network, existing medical records, and referring health care providers.

Goal Setting
Involvement of the person with diabetes is critical for achievement of goals. Effective goal setting for each of the AADE7™ Self-Care Behaviors is both self-directed by the patient and collaborative between the diabetes educator and the patient. One of the goals of diabetes education is to improve overall health status by empowering the person with diabetes to acquire the necessary self-management knowledge and skills, develop the confidence to perform appropriate self-care behaviors, and develop the problem solving and coping skills to overcome any barriers to self-care behaviors.

Accordingly, theoretical approaches to behavior change, patient empowerment, and patient-centered communication are used to facilitate goal setting. Theoretical approaches include social cognitive theory, theory of reasoned action, transtheoretical model, and theory of planned behavior. Patient empowerment is a philosophical approach that speaks to the values and vision of the educator. These theories and models assist patients in identifying behaviors they wish to address and then work with the diabetes educator to create a self-directed behavior change plan.

Planning

The diabetes educator develops the DSME/T plan to attain the mutually defined goals and outcomes. The plan integrates current diabetes care practices and established principles of teaching, learning, and behavior change. The plan is coordinated among the diabetes health care team members, the person with or at risk for diabetes, his or her family and other relevant support systems, and the referring provider.
Table 3. General Scope of Diabetes Educational/Clinical Care Activities

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Level 1 Non-Healthcare Professional</th>
<th>Level 2 Healthcare Professional Non-Diabetes Educator</th>
<th>Level 3 Non-Credentialed Diabetes Educator</th>
<th>Level 4 Credentialed Diabetes Educator</th>
<th>Level 5 Advanced Level Diabetes Educator/Clinical Manager* (non-Rx with protocols or Rx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Follow office or hospital protocol for patient intake</td>
<td></td>
<td>• Assess basic DM skills/knowledge of diabetes and literacy/numeracy</td>
<td>• Assess for motivation and readiness to learn and make behavior changes</td>
<td>• Assess attitude toward learning and preferred learning style</td>
<td>• Assess basic DM skills/knowledge of diabetes and literacy/numeracy</td>
</tr>
<tr>
<td>• Verify basic literacy/numeracy</td>
<td></td>
<td>• Assess impact of social, economic and cultural aspects/circumstances</td>
<td>• Assess for motivation and readiness to learn and make behavior changes</td>
<td>• Assess attitude toward learning and preferred learning style</td>
<td>• Assess impact of social, economic and cultural aspects/circumstances</td>
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<tr>
<td>• Provide support and basic information/guidance for accessing care</td>
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<td>• Assess cultural barriers to self care or behavior change</td>
<td>• Assess impact of social, economic and cultural aspects/circumstances</td>
<td>• Assess attitude toward learning and preferred learning style</td>
<td>• Assess for motivation and readiness to learn and make behavior changes</td>
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<td>• Assess family and community support system</td>
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<td>• Assess availability of healthy food choices and community resources for engagement in physical activity</td>
<td>• Assess for food/drug interactions</td>
<td>• Assess for use of OTC medications and supplements</td>
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<td>• Assess cultural barriers to self care or behavior change</td>
<td></td>
<td>• Assess basic DM skills/knowledge of diabetes and literacy/numeracy</td>
<td>• Screen for food/drug interactions</td>
<td>• Assess for use of OTC medications and supplements</td>
<td>• Assess basic DM skills/knowledge of diabetes and literacy/numeracy</td>
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<td>• Assess availability of healthy food choices and community resources for engagement in physical activity</td>
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<td>• Assess for acute and long-term complications</td>
<td>• Assess for use of OTC medications and supplements</td>
<td>• Perform clinical assessment, including relevant lab values</td>
<td>• Assess basic DM skills/knowledge of diabetes and literacy/numeracy</td>
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<td>• Assess for use of OTC medications and supplements</td>
<td>• Perform physical assessment, including signs of malnutrition and anthropometrics</td>
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<td>• Assess for use of OTC medications and supplements</td>
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</tbody>
</table>

* Advanced Level Diabetes Educator/Clinical Manager with protocols or Rx.
<p>| Goal Setting | • May help set goals | • Increase intake of vegetables and fruit | • Guide patient in setting individualized behavioral goals | • Guide patient in setting individualized behavioral and clinical goals to address needs identified in all areas of the assessment | • Guide patient in setting individualized behavioral and clinical goals to address needs identified in all areas of the assessment | • Assess for diabetes-specific and related medication use (i.e., insulin-to-carb ratios) | • Assess for psychosocial adjustment, including coping strategies and eating disorders |
| Planning | • Follow prescriber’s orders and diabetes educator’s guidance | • Follow prescriber’s orders and CDE guidance for plan | • Develop basic plan related to acquiring necessary DM skills based on needs identified in assessment | • Develop an educational plan to address behavioral goals established in the goal setting process | • Develop a detailed intervention plan to address both clinical and behavioral goals established in the goal setting process | • Guide patient to prioritize goals based upon assessment and preference | • Guide patient to prioritize goals based upon assessment and preference |
| | | | • Develop success metrics | • Develop success metrics | • Develop success metrics | • Develop success metrics | • Develop success metrics |
| | | | • Use behavior change methodology (MI, cognitive therapy, etc.) to ensure and influence patient participation in the education process. | • Use behavior change methodology (MI, cognitive therapy, etc.) to ensure and influence patient participation in the education process. | • Use behavior change methodology (MI, cognitive therapy, etc.) to ensure and influence patient participation in the education process. | • Refer to prescriber as necessary | • Refer to specialist as necessary |
| | | | • Plan strategies for addressing barriers identified | • Plan strategies for addressing barriers identified | • Plan strategies for addressing barriers identified | • Plan strategies for addressing barriers identified | • Plan strategies for addressing barriers identified |
| | | | • Refer to prescriber as necessary | • Refer to prescriber as necessary | • Refer to prescriber as necessary | • Refer to prescriber as necessary | • Refer to prescriber as necessary |
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<table>
<thead>
<tr>
<th>Implementation</th>
<th>Evaluation/ Follow-Up</th>
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<tr>
<td>Offer guidance on accessing care and financial issues (reimbursement)</td>
<td>Monitor adherence</td>
</tr>
<tr>
<td>Refer to prescriber or CDE as needed</td>
<td>Report assessment findings to prescriber and DE</td>
</tr>
<tr>
<td>Suggest/support assist with DM skill training; offer guidance on accessing care and financial issues (reimbursement)</td>
<td>Monitor adherence</td>
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<tr>
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<tr>
<td>Provide culturally appropriate basic health information</td>
<td>Monitor adherence</td>
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<tr>
<td>Organize community advocacy activities</td>
<td>Refer to prescriber or CDE as needed</td>
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<tr>
<td>Explain procedures</td>
<td>Re-assess cognition of goals and plan</td>
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<tr>
<td>Assist with skill development</td>
<td>Monitor adherence</td>
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<tr>
<td>Recommend &amp; execute plan; insure pt has the knowledge, skills and resources necessary to follow through on the plan</td>
<td>Refer to prescriber or CDE as needed</td>
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<tr>
<td>Identify and address barriers that become evident throughout the process</td>
<td>Re-assess cognition of goals and plan</td>
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<td></td>
<td>Re-assess clinical and behavioral goal achievement at each visit</td>
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<td></td>
<td>Re-assess and revise plan and goals</td>
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<td>Re-assess cognition/re-evaluate knowledge and skills</td>
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<td>Monitor adherence to plan</td>
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<td>Refer to prescriber or others as needed</td>
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<td>Re-assess cognition of goals and plan</td>
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<td>Monitor adherence to plan</td>
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<td>Refer to other specialists as appropriate</td>
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*Includes but not limited to, BC-ADM and Advanced Practice Nurse

NOTE: Level 4 and 5 practitioners may supervise those in the lower levels.
Implementation

The diabetes educator provides DSME/T according to the agreed upon plan. The educator guides implementation of the DSME/T plan and interfaces with the various care providers, patient and caregivers, as noted above. Implementation also may be linked to other community and professional services/resources. It is important that patients fully understand and are able to perform the tasks defined in the plan.

Evaluation/Monitoring

For each patient, the diabetes educator evaluates the quality and outcomes of the self-care behaviors at baseline, and at regular intervals to determine the effectiveness of the DSME/T for the individual in the 7 behavioral areas. The educator uses individual outcomes to guide the intervention for each patient with diabetes. Ongoing evaluation and monitoring of plan implementation is a critical component of behavior change. Providers will facilitate this process according to their appropriate level (Table 3).

Practice Question 4: Who should deliver diabetes education and training to persons with diabetes?

Diabetes education has historically been provided by nurses and dietitians. However, the role of the diabetes educator has expanded to providers in other disciplines; this is especially true of pharmacists, who have demonstrated successful implementation of diabetes education programs in retail pharmacy settings. In addition, a number of other health care providers (e.g., physicians, exercise physiologists, mental health specialists) actively provide DSME/T. Eye care specialists and podiatrists also contribute their expertise to education programs.

Although reports on the effectiveness of the various disciplines for education are mixed, registered nurses, registered dietitians, and registered pharmacists are generally viewed as the primary providers of diabetes education and curriculum development. However, the AADE also recognizes the importance and contributions of lay health and community workers who are uniquely positioned to collaborate with diabetes educators and other health care providers to improve the quality of diabetes care in communities.

Practice Question 5: What are the unique roles and responsibilities of those who deliver diabetes education and care?

Diabetes education is provided by health care professionals from many disciplines, involving practitioners with varying levels of experience/expertise in diabetes management, diabetes education, and clinical care.

Given the diversity of DSME/T providers and skill levels, it is necessary to delineate levels of practice for the delivery of DSME/T (Table 3). These guidelines propose five distinct levels of care that are differentiated by
educational preparation, credentialing, professional practice regulations, and the clinical practice environment, as follows:

**Level 1**, non-health care professional; **Level 2**, health care professional non-diabetes educator; **Level 3**, non-credentialed diabetes educator; **Level 4**, credentialed diabetes educator; and **Level 5**, advanced level diabetes educator/clinical manager (Table 3).

**Level 1: Non-Health Care Professional**

Level 1 includes community health care workers and other non-professional health care providers who have little expertise in diabetes education and/or management, but provide and/or support health care services to individuals with diabetes. This level includes, but is not limited to: health promoters, health educators, and community health workers.

A key focus of level 1 individuals, particularly community health workers, is practical problem solving, advocacy, and assistance with obtaining access to care, services, medications, etc. Performance of activities at this level of care should be under the direction of a qualified diabetes health care professional who has training and expertise in areas relative to the direct/support services specified in Table 3. Non-diabetes educators can be expected to perform the following:

- **Assessment**: Measure vital signs and anthropometrics, assess literacy, and follow protocols for patient intake. Assessment may include family and social support systems. Provide support, general information, and guidance regarding accessing care, available diabetes education offerings, and financial assistance.

- **Goal Setting**: May help patients by providing basic information and assisting in setting basic goals for healthy eating and physical activity.

- **Planning**: Follow the prescriber’s orders and diabetes educator’s guidance for planning.

- **Implementation**: Refer/support diabetes management skill training, and offer guidance on accessing care and financial resources. Level 1 DSME/T providers may lead support groups or organize a community physical activity (e.g., walking group). Level 1 providers refer to the prescriber or diabetes educator as needed.

- **Monitoring/Evaluation**: Monitor progress toward the plan and report findings to the prescriber and diabetes educator.

**Level 2: Health Care Professional Non-Diabetes Educator**

This level includes professional health care providers who have little expertise in diabetes education and/or management, but provide and/or support health care services to individuals with diabetes. This level includes, but is not limited to: medical assistants (MAs), licensed practical nurses (LPNs), registered nurses (RNs), nutritionists,
dietetic technicians registered (DTR), registered pharmacists (RPh), and others. As with level 1 providers, a key focus of individuals at this level is practical problem solving, advocacy, and assistance with obtaining access to care, services, medications, and so forth. Performance of activities at this level of care assumes that the individual is a health care professional working under the direction of a qualified diabetes health care professional and has training and expertise in areas relative to the medical and direct/support services specified in Table 3. The amount and type of professional education is the main distinction between Level 1 and Level 2 non-diabetes educators. (Table 3) The Level 2 health care professional non-diabetes educator can be expected to perform the following tasks with, perhaps, greater insight into the overall health status of the patient than can the Level 1 educator:

- **Assessment:** Measure vital signs and anthropometrics, assess literacy, and follow protocols for patient intake. Assessment may include family and social support systems. Provide support and general information and guidance regarding accessing care (i.e., available diabetes education offerings) and financial assistance.

- **Goal Setting:** Level 2 providers assist patients by providing basic information, assisting in setting basic goals for healthy eating and physical activity, and by identifying community resources.

- **Planning:** Follow the prescriber’s orders and diabetes educator’s guidance for planning.

- **Implementation:** Refer/support/assist diabetes management skill training. For example, level 2 providers might offer guidance on accessing care, identify financial resources, and provide culturally appropriate basic health information. Level 2 providers may lead support groups or organize community physical activity (e.g., walking group). They may refer to prescriber or diabetes educator as needed.

- **Monitoring/Evaluation:** Monitor progress toward the plan and report findings to the prescriber and diabetes educator.

**Level 3: Non-Credentialed Diabetes Educator**

Diabetes educators are health care professionals who have achieved a core body of knowledge and skills in the biological and social sciences, communication, counseling, and education and who have experience in the care of people with diabetes. Level 3 includes individuals who meet the AADE definition of “diabetes educator” but are not credentialed as a certified diabetes educator (CDE) or board certification in advanced management (BC-ADM). AADE defines diabetes educators as follows: “Diabetes educators are healthcare professionals who focus on helping people with and at risk for diabetes and related conditions achieve behavior change goals which, in turn, lead to better clinical outcomes and improved health status. Diabetes educators apply in-depth knowledge and skills in the biological and social sciences, communication, counseling, and education to provide self-management education/self-management training.”

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This level includes, but is not limited to: registered nurses, registered dietitians, registered pharmacists, licensed mental health professionals, and exercise physiologists. Regardless of discipline, the diabetes educator must be prepared to assist persons with diabetes in attaining the knowledge and skills to effectively manage their diabetes. Diabetes educators must possess a body of knowledge that spans across disciplines to provide comprehensive DSME/T. For example, RDs who are also diabetes educators may provide instruction for insulin injection, insulin dosing, and medication side effects, in addition to nutrition counseling. Moreover, RDs can also provide MNT as a separate service; use of both DSME/T and MNT may be more efficacious for some patients than for those who receive just one of these interventions. 

Other examples include exercise physiologists who function in the diabetes educator role may help patients develop a meal plan, and pharmacists may provide counseling and instruction about foot care in addition to instruction on proper use of medications. (Table 3)

It is the position of the AADE that all diabetes educators should work toward receiving formal certification. Diabetes educators, as well as those with the CDE credential or the advanced BC-ADM (board certification in advanced diabetes management) credential, are chiefly concerned with and actively engaged in the process of DSME/T, as follows:

- **Assessment:** Conduct a thorough, individualized self-management assessment of the person with or at risk for diabetes.

- **Goal Setting:** Guide the patient in setting and prioritizing individualized behavioral goals based on assessment and preference. This process also includes developing success metrics for the specific behavior(s) to be addressed.

- **Planning:** Collaboratively develop basic plans for persons with diabetes to acquire necessary diabetes self-management skills based on the needs identified in the assessment.

- **Implementation:** Provide diabetes self-care skill training. Offer guidance on accessing care and financial issues (reimbursement) and refer to prescriber or CDE or BC-ADM as needed.

- **Monitoring/Evaluation:** Re-assess understanding of and progress toward the patient's goals and plan, and refer to the prescriber or CDE as needed.

**Level 4: Credentialed Diabetes Educator**

In addition to fulfilling the requirements of a diabetes educator, certified diabetes educators (CDEs) meet the academic, professional, and experiential requirements set forth by the National Certification Board for Diabetes Educators (NCBDE). As part of the application process, a diabetes educator must document that he or she meets all the criteria for certification. An accepted applicant must demonstrate competency in the required body of knowledge and skills by means of a written examination. Certification is valid for a period of 5 years and is
maintained either through repeat examination or through documented participation in relevant continuing education activities every 5 years. As specified in Table 3, Level 4 providers can be expected to perform the following:

- **Assessment:** Use the assessment performed by Level 1, 2, or 3 providers. Perform assessments of physical health, medications, and psychosocial issues and identify areas for education and clinical interventions.

- **Goal Setting:** Guide persons with diabetes in setting individualized behavioral and clinical goals to address the needs identified in all areas of the assessment, develop success metrics, and use behavior change methodology to facilitate patient participation in the education process.

- **Planning:** Develop an education plan to address behavioral goals established during the goal setting process, develop a learning plan to address gaps in knowledge, collaborate with patients to plan strategies for addressing barriers identified, and refer to the prescriber as needed.

- **Implementation:** Recommend and execute plans, ensuring that the patient has the knowledge, skills, and resources necessary to follow through on the plan. Identify and address barriers that become evident throughout the process.

- **Monitoring/Evaluation:** At each visit, monitor progress of the plan and re-assess the patient's understanding of goals and plan, knowledge and skills, and clinical and behavioral goal achievement. Providers, in collaboration with the patient, revise the plan and goals as needed. They refer to the prescriber as needed.

**Level 5: Advanced Level Diabetes Educator/Clinical Manager**

Practitioners with the BC-ADM credential and other providers at this level incorporate skills and strategies of DSME/T into more comprehensive clinical management of people with diabetes. Level 5 practice is characterized by autonomous assessment, problem identification, planning, implementation, and evaluation of diabetes care. Providers at this level function either with protocols or have prescriptive authority. To meet Level 5 criteria, these individuals must possess skill in performing complete and/or focused assessments, recognizing and prioritizing complex data, and providing therapeutic problem solving, counseling, and regimen adjustments for persons with diabetes. As specified in Table 3, Level 5 roles and responsibilities include:

- **Assessment:** Use the assessment performed by Level 1, 2, 3, and 4 providers. Perform more complex assessments of physical health, medications, and psychosocial issues and make a diagnosis for education and clinical interventions.

- **Goal Setting:** Guide patients in setting individualized behavioral and clinical goals to address the needs identified in all areas of the assessment, develop success metrics, and use behavior change methodology to facilitate and influence patient participation in the education process.
• **Planning:** Develop an education plan to address both behavioral and clinical goals established during the goal setting process, develop a learning plan to address gaps in knowledge, and collaborate with patients to plan strategies for addressing barriers identified.

• **Implementation:** Recommend and execute plans, ensuring that the patient has the knowledge, skills, and resources necessary to follow through on the plan. Identify and address barriers that become evident throughout the process.

• **Monitoring/Evaluation:** At each visit, monitor progress of the plan and re-assess the patient's understanding of goals and plan, knowledge and skills, and clinical and behavioral goal achievement. Providers involve the patient in revising the plan and goals as needed. Follow protocols as prescribed, make treatment changes and refer to other specialists as needed.

### Cost of Implementing the Guidelines

Studies on the economic impact associated with the implementation of guidelines have generally confirmed that standardizing practice results in cost savings. AADE estimates that the economic implications of implementing these guidelines will be minimal and the benefits in improved patient outcomes are likely to be notable. However, the actual costs (and savings) of guidelines implementation for the practice of diabetes education have not been addressed and will remain unclear until specific analyses of guidelines adoption have been undertaken.

### Addressing Potential Barriers to Implementation of these Guidelines

The AADE recognizes that implementation of the recommendations included in these guidelines may be affected by barriers to the delivery of DSME/T at the patient, practitioner, organizational, or societal level. These barriers may include:

• Lack of public awareness regarding the severity of diabetes and the importance of DSME/T.

• Inadequate and/or lack of reimbursement and coverage limitations relevant to DSME/T.

• Inadequate and/or lack of staffing and resource allocation within clinical and community settings.

• Practice constraints regarding licensure and inconsistencies from state to state.

• Institutional resistance to change (e.g., need to adjust staffing, workflow, role delineation, budgets).

A recent claims data analysis supports the use of diabetes education and training as a cost-effective component of quality care for all persons with diabetes. Although it is beyond the scope of this document to address the financial
and organizational barriers identified, AADE is actively working with local, state, and federal policy makers to resolve these issues and expand access to DSME/T for all persons with diabetes. Further, AADE has developed education resources and tools to assist DSME/T providers in integrating the AADE7™ framework into their practices. These resources and tools are available on the AADE website (www.diabeteseducator.org/ProfessionalResources).

**Looking to the Future**

These guidelines address the current practice climate of DSME/T, while the theory underlying self-management continues to evolve. It is likely the education and professional preparation of diabetes educators will continue to adapt to accommodate the emerging theories, be outcomes driven and address the roles and competencies for each level of educator.

The literature reflects increasing focus on prevention of diabetes and contains recent reports on models of delivery that are being built on telephonic/electronic communication. 136,137

In the future, some education interventions are likely to be provided via the Internet and other electronic means of delivery. To remain current, AADE will review these guidelines every three years and revise as needed.

**Summary**

Diabetes is a serious disease that is reaching epidemic proportions and affects an estimated 24 million Americans. Poorly controlled diabetes leads to a number of severe complications and death. 26 The annual direct and indirect costs associated with diabetes and its complications are considerable. 22

Intensive management of diabetes can significantly decrease the development and/or progression of diabetic complications, 23,28,29 and it has been found to be cost-effective in primary practice settings. 31 Because diabetes is predominately a self-managed disease, effective self-management requires patients to understand and use multiple technologies, medications, complex treatment strategies, and problem-solving skills. 23,28,33 The diabetes educator is in a unique position to address patients and healthcare system needs.

Although DSME/T is recognized as a crucial component in diabetes care, 35 many patients never receive formal training. 36 The AADE recognizes the need to make DSME/T available to all persons with diabetes. DSME/T providers must be competent to deliver quality services within the context of their practice levels. AADE further advocates the use of a defined process and education strategies that facilitate positive self-care behaviors.

These guidelines serve to clarify the roles and responsibilities of DSME/T providers. The AADE encourages all DSME/T providers to incorporate these guidelines into their practices in order to expand access to high-quality diabetes education and thereby improve the quality of diabetes care.
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