Diabetes Educator Practice Levels



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Overview

Diabetes educators are specialized healthcare providers who have the education, experience, and credentialing needed to effectively work with people across the spectrum of diabetes to better enable them to engage in impactful self-care.[1,2,3] Within this specialty, education, training, and experience will contribute to a range of competency levels.[1] There are currently three diabetes-specific credentials available in the US: the Certified Diabetes Educator (CDE®), the Board Certified in Advanced Diabetes Management (BC-ADM) and the Certified Diabetes Technology Clinician (CDTC). Specific information about these credentials can be found at links to the organizations holding these credentials.[4-6]

In 2013, the American Association of Diabetes Educators (AADE) Board of Directors empaneled a workgroup to review the existing levels of practice for diabetes educators, and existing professional support documents. The charge was to determine if the five previously designated diabetes educator levels of practice were appropriate, and if the Association's supporting documents reflected current practice. The workgroup recommended a revision of the levels of practice to better reflect new developments that have occurred in diabetes disease management and healthcare, including the increased prevalence of prediabetes and diabetes, and changes in the healthcare professionals and paraprofessionals providing DSME. This revision to the levels of practice was approved by the AADE Board of Directors in April 2014.

Recognizing that diabetes education is a subspecialty of many professions, the revisions were made by adopting the skills acquisition Dreyfus model which is used successfully in business and the healthcare professions. This model distinguishes varying levels of expertise in a field, ranging from novice to expert.[7-9] In addition, Bloom's taxonomy of educational objectives were used to frame the cognitive, affective, and psychomotor domains of learning in the revisions to the levels of practice. According to the revised Bloom's taxonomy, there are six cumulative levels of cognitive behavior: remembering, understanding, applying, analyzing, evaluating, and creating (formerly: knowledge, comprehension, application, analysis, synthesis, and evaluation). As the clinician moves from novice to clinical expert, he or she should also be moving from application of knowledge to analysis, synthesis, and evaluation.[10, 11]

Revised Practice Levels

The revised levels of practice are provided in Table 1: Diabetes Educator Provider Levels and Table 2: Associate Diabetes Educator Provider Levels. In Table 1, the Level 1, diabetes educators are typically point of care healthcare professionals who have completed the educational requirements for a specific health profession degree. They are licensed to practice in their primary professional discipline or members of a professional registry. While Level 1 diabetes educators have the basic background

knowledge of diabetes inherent to health professional academic training, many have not developed a broad-based diabetes practice knowledge base. Individuals with diabetes commonly interface with Level 1 diabetes educators in hospitals, clinics, homecare, and pharmacy settings. It is critical that this level of provider has sufficient knowledge to provide accurate safe-care information to the diabetes patient. Level 1 diabetes educators are at the beginner or advanced beginner level on the Dreyfus continuum.[8, 9] The educator's focus at this level is on transmitting knowledge related to essential skills for safe self-management and basic level coaching for behavior change. From the standpoint of Bloom's (revised) taxonomy, at Level 1, the educator's focus is on the lowest level objectives, e.g., Remembering, Understanding, and Applying.[10, 11] Clinicians at this level possess the teaching and learning skills developed in their professional program of origin. The Level 1 diabetes educator can instruct the patient on simple nutrition guidelines, record keeping and the importance of attending DSME classes.

Level 2 diabetes educators are those healthcare providers who have achieved an advanced body of core knowledge and skills related to diabetes education and/or management above that which is required by the profession of origin. The Level 2 diabetes educator would possess the minimum competencies to meet the academic, professional, and experiential criteria to qualify for and maintain the CDE® credential. However, Level 2 diabetes educators may or may not hold the CDE® credential. A number of qualified educators do not meet all criteria set by the certifying board e.g., practice hours. These educators may be found in a variety of settings, and may include home care nurses, pharmacists, hospital patient educators, and academics who have considerable experience working with diabetes patients, but whose practice is not limited to diabetes. Thinking about Bloom's taxonomy, at this level, the educator's focus is on applying, analyzing, and evaluating.[10,11] While these mid and higher level learning objectives still allow for transmission of knowledge and skill sets, there is an increasing focus on facilitating behavior change. The Level 2 educator has the knowledge, skill, and ability to provide individualized assessment of learning needs and deliver content specific to these needs.

Level 3 diabetes educators are advanced level experts in diabetes education, clinical management and/or research. This group constitutes the most expert diabetes educators, e.g., those who have the greatest amount of experience and expertise in the field of diabetes education and management. Level 3 educator/clinicians are involved in integrated, comprehensive, and global management of people with diabetes. As with the Level 2 education, diabetes educators at Level 3 may or may not hold voluntary credentialing in the specialty, but can demonstrate the competencies associated with the highest level of practice in diabetes education. This level of practice is characterized by care coordination and management, autonomous assessment, problem identification, planning, implementation, and evaluation of diabetes care. It involves excellent communication as well as complex critical thinking and clinical decision making skills. An educator at Level 3 typically has considerable experience and advanced skills in the delivery of diabetes self-management education. This knowledge and experience enables this educator to work with even the most complex patients with diabetes. Always guided by individual scope of practice, the clinician/educator's focus is on higher level counseling, regimen adjustment, therapeutic problem solving, and recognizing and prioritizing complex data. He or she engages in clinical and educational assessments to guide clinical decision-making and is a resource for development of management materials and policies. At the patient level, the Level 3 educator maximizes teaching and learning skills to focus on analyzing, evaluating, and creating.

With more than 100 million Americans in 2014 already diagnosed with or at high risk for developing diabetes, [12] this spectrum of educators (levels 1-3) are indispensable for the delivery of DSME and support of the person with diabetes. In practice, health navigators, community health workers, pharmacy technicians, medical assistants, and others assist in the implementation of DSME

programs.[14,15,16] In support of their important roles in diabetes education, the 2013 workgroup recommended and the AADE Board of Directors approved the recognition of these individuals as Associate Diabetes Educators (ADEs) (Table 2). AADE recognizes 2 levels of practice for ADEs. Level 1 ADEs are complementary workers who interact with those who have or are affected by diabetes, and they have various roles in the dissemination of information, acquisition of baseline skills, and provision of and linkage to other community resources for self-management support. Level 1 ADEs include lay health workers, community health workers, peer counselors, and health navigators. Level 2 ADEs are complementary healthcare workers who have a defined role in an accredited or recognized diabetes education or prevention program. Certified nursing assistants, medical assistants, registered dietetic technicians, pharmacy technicians, and others may qualify as Level 2 ADEs. Through formal recognition of ADEs, it is expected that Level 3 Diabetes Educators will continue to assume key roles in designing and directing DSME practice, but will also focus on how best to educate, support and mentor ADEs and other diabetes educators.

To assist with this, AADE has developed a series of competencies for diabetes educators. These competencies provide structure for the knowledge, skills and abilities required for practice at each level across the continuum of diabetes care. The knowledge base needed to provide quality diabetes education is multifaceted, so the competencies are structured into five domains (Table 3). For more detailed information on these five competency domains, review the document, *Competencies for Diabetes Educators*.[17]

Purpose and Use of the Practice Levels

The purpose of the practice levels is to increase access to DSME and achieve better patient care by:

1. Delineating the roles and responsibilities of the multiple levels of diabetes educators and associate diabetes educators
2. Suggesting a career path for diabetes educators and associate 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 and intention of the levels to address the range of activities that diabetes care practitioners may be educated and authorized to perform based on facility and organizational policies and bylaws, clinical privileging, state practice acts, and state occupational supervision regulations.

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, training and care for all persons with diabetes and their families/caregivers. The list of target users includes, but is not limited to: diabetes educators, associate diabetes educators, and other healthcare providers, healthcare payers and policy makers, voluntary health organizations, businesses, professional associations, governmental and non-governmental agencies, and other stakeholders.

This document is intended to be used in conjunction with the *Competencies for Diabetes Educators*, [17] which provide a comprehensive description of the knowledge, skills, and competencies necessary for the delivery of DSME and care at various practice levels.[17]

AADE will continue to 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 healthcare practitioners.

Table 1: Diabetes Educator Provider Levels

	Diabetes Educator Level 1	Diabetes Educator Level 2	Diabetes Educator Level 3
Educational Background	Level 1 educators are healthcare providers who interact professionally with diabetes patients to provide the essential knowledge and skills needed for safe self-care. Level 1 designation includes but is not limited to registered nurses (from any accredited entry level education program), advanced practice nurses, registered dietitians (licensed or registered), pharmacists (licensed or registered), exercise physiologists, physical therapists, physicians assistants, and physicians.	Level 2 educators are healthcare providers who have achieved an advanced body of core knowledge and skills related to diabetes education and/or management above that which is required by the profession of origin. Level 2 incorporates those providers who meet the academic, professional, and experiential criteria to qualify for and maintain the CDE® credential. A distinction is made between the newly credentialed educator who is competent in all and proficient in some areas of diabetes knowledge, and the level 3 educators who are at the highest level of expertise in the field.	Level 3 educators are advanced level experts in diabetes education, clinical management and/or research. The Level 3 educator encompasses those involved in integrated, comprehensive, and global management of people with diabetes. This includes, but is not limited to clinicians, researchers, and academics, program managers, healthcare administrators, and consultants. The educator at this level may hold the CDE® credential, meets the academic, professional, and experiential criteria to qualify for and maintain the BC-ADM credential, and may be recognized as a Fellow of the American Association of Diabetes Educators. This level of practice is characterized by care coordination and management, autonomous assessment, problem identification, planning, implementation, and evaluation of diabetes care. Additionally, it involves excellent communication as well as complex critical thinking and clinical decision making skills. High level clinical and non-clinical practice is characteristic of this level.

Educator/Clinician Level of Practice	Beginner/Advanced Beginner Basic	Competent/Proficient Intermediate	Expert Advanced level
Expected and Domain Specific knowledge, skills, adaption (KSA) for delivery of diabetes education /support	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The educator's focus is on transmitting knowledge related to essential skills for safe, self-management	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The educator/clinician's focus is on both knowledge and skills to create individualized self-management plans, coordinate care, interpret personal data, conduct focused and/or complete educational assessments and promote successful self-management through adaptation.	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The clinician/educator's focus is on higher level counseling, regimen adjustment (as appropriate for scope of practice), recognizing & prioritizing complex data, and therapeutic problem solving, Focused and/or complete clinical and educational assessments are used to guide decision-making. Develop management materials and policies
Non-Diabetes Foundational Skills for the Delivery of Diabetes Education	Bloom's taxonomy: Remembering, Understanding, Applying Teaching & Learning Skills: Pre-processed delivery models	Bloom's taxonomy: Applying, Analyzing Evaluating Teaching & Learning Skills: Individualized assessment & delivery Educator facilitated group discussion. Differentiate teaching from learning objectives	Bloom's taxonomy: Analyzing, Evaluating, Creating Teaching & Learning Skills: Creative, Individualized teaching for self-management. Developing and evaluating new models of education
Novice to Expert Continuum (Dreyfus Model): Expertise develops over time	Entry Level Clinician/Educator	CDE®/Experienced Clinician	BC-ADM/CDE®/FAADE/Expert
Years in *Direct* Diabetes Education and/or Management	0 – 2 years of direct care experience in diabetes (percentage of time devoted to diabetes specialty practice)	3 – 5 years post achievement of CDE®/or more experienced in diabetes clinical/ educational care	More than 5 years of direct engagement in the diabetes as a specialty practice

	Diabetes Educator Level 1	Diabetes Educator Level 2	Diabetes Educator Level 3
Educational Background	Level 1 educators are healthcare providers who interact professionally with diabetes patients to provide the essential knowledge and skills needed for safe self-care. Level 1 designation includes but is not limited to registered nurses (from any accredited entry level education program), advanced practice nurses, registered dietitians (licensed or registered), pharmacists (licensed or registered), exercise physiologists, physical therapists, physicians assistants, and physicians.	Level 2 educators are healthcare providers who have achieved an advanced body of core knowledge and skills related to diabetes education and/or management above that which is required by the profession of origin. Level 2 incorporates those providers who meet the academic, professional, and experiential criteria to qualify for and maintain the CDE® credential. A distinction is made between the newly credentialed educator who is competent in all and proficient in some areas of diabetes knowledge, and the level 3 educators who are at the highest level of expertise in the field.	Level 3 educators are advanced level experts in diabetes education, clinical management and/or research. The Level 3 educator encompasses those involved in integrated, comprehensive, and global management of people with diabetes. This includes, but is not limited to clinicians, researchers, and academics, program managers, healthcare administrators, and consultants. The educator at this level may hold the CDE® credential, meets the academic, professional, and experiential criteria to qualify for and maintain the BC-ADM credential, and may be recognized as a Fellow of the American Association of Diabetes Educators. This level of practice is characterized by care coordination and management, autonomous assessment, problem identification, planning, implementation, and evaluation of diabetes care. Additionally, it involves excellent communication as well as complex critical thinking and clinical decision making skills. High level clinical and non-clinical practice is characteristic of this level.
Educator/Clinician Level of Practice	Beginner/Advanced Beginner	Competent/Proficient Intermediate	Expert Advanced level

	Basic		
Expected and Domain Specific knowledge, skills, adaption (KSA) for delivery of diabetes education /support	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The educator's focus is on transmitting knowledge related to essential skills for safe, self-management	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The educator/clinician's focus is on both knowledge and skills to create individualized self-management plans, coordinate care, interpret personal data, conduct focused and/or complete educational assessments and promote successful self-management through adaptation.	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators The clinician/educator's focus is on higher level counseling, regimen adjustment (as appropriate for scope of practice), recognizing & prioritizing complex data, and therapeutic problem solving, Focused and/or complete clinical and educational assessments are used to guide decision-making. Develop management materials and policies
Non-Diabetes Foundational Skills for the Delivery of Diabetes Education	Bloom's taxonomy: Remembering, Understanding, Applying Teaching & Learning Skills: Pre-processed delivery models	Bloom's taxonomy: Applying, Analyzing Evaluating Teaching & Learning Skills: Individualized assessment & delivery Educator facilitated group discussion. Differentiate teaching from learning objectives	Bloom's taxonomy: Analyzing, Evaluating, Creating Teaching & Learning Skills: Creative, Individualized teaching for self-management. Developing and evaluating new models of education
Novice to Expert Continuum (Dreyfus Model): Expertise develops over time	Entry Level Clinician/Educator	CDE®/Experienced Clinician	BC-ADM/CDE®/FAADE/Expert
Years in *Direct* Diabetes Education and/or Management	0 – 2 years of direct care experience in diabetes (percentage of time devoted to diabetes specialty practice)	3 – 5 years post achievement of CDE®/or more experienced in diabetes clinical/ educational care	More than 5 years of direct engagement in the diabetes as a specialty practice

Table 2: Associate Diabetes Educator Provider Levels

	Associate Diabetes Educator Level 1	Associate Diabetes Educator Level 2
Background and Criteria	Level 1 associate diabetes educators (ADEs) are complementary workers who interact with those who have or are affected by diabetes. ADEs have various roles in the dissemination of information, acquisition of baseline skills and provision of self-management support. Level 1 designation includes, but is not limited to lay health, community health workers, peer counselors, health navigators, health promoters, health coaches, and assistive school personnel with some level of preparation in a recognized healthcare field.	Level 2 associate diabetes educators (ADEs) are complementary healthcare workers who have a defined role in a certified or recognized diabetes education or prevention program. They may also be aligned with practices that serve a dedicated or focused proportion of diabetes patients. The Level 2 designation includes, but is not limited to, Certified Nursing Assistants, Medical Assistants, Dietetic Technicians Registered, Pharmacy Technicians, Physical Therapy Assistants, and Licensed Practical Nurses.
Dreyfus Model Level	Novice to Expert specific to role	Novice to Expert specific to role
Expected and Domain Specific knowledge, skills, adaption (KSA) for diabetes educator associates	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators Minimal knowledge Practical problem solving Advocacy	Competencies for Diabetes Educators Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators

Table 3: Competencies for Diabetes Educators and Associate Diabetes Educators

Domain I: Pathophysiology, Epidemiology, and Clinical Guidelines of Diabetes This domain addresses the competencies needed for individuals to demonstrate familiarity with pathophysiology, epidemiology, and clinical guidelines consistent with diabetes care provider level.
Domain II: Culturally-Competent Supportive Care Across the Lifespan This domain addresses the competencies needed to provide diabetes support and care in a culturally competent manner across the lifespan.
Domain III: Teaching and Learning This domain addresses the competencies needed to apply principles of teaching and learning and/or behavior change to facilitate self-management skills of individuals with diabetes.
Domain IV: Self-Management Education This domain addresses the competencies needed to work with an interdisciplinary diabetes care team to tailor interventions to individual patient self-management education needs.
Domain V: Program and Business Management This domain addresses the competencies needed to apply principles of program and/or business management to create a climate that supports successful self-management of diabetes.
Source: American Association of Diabetes Educators, Chicago, Illinois, USA, 2014.

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