

**Competencies for Diabetes Educators:
A Companion Document
to the
Diabetes Educator Practice Levels**



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Overview

More than 29 million Americans have diabetes and an additional 86 million are believed to have prediabetes.¹ At the global level, the number of people with diabetes has more than doubled in the past three decades.² The total economic cost of diabetes in the U.S. alone was estimated at \$245 billion in 2012.¹ Because the person with diabetes is responsible for 99% of their own care,³ he or she must be equipped with the knowledge and skills needed for effective diabetes self-management. Diabetes education improves clinical outcomes and quality of life;^{4, 5} it is therefore recognized that persons with diabetes should have access to diabetes self-management education (DSME).⁶⁻⁸

DSME is the formal process of providing people with or at risk for diabetes with the knowledge and skill required to reach their self-defined diabetes goals.^{5, 6, 9, 10} People with diabetes may receive DSME in a variety of settings including physician offices, clinics, hospitals, pharmacies, or other community settings.^{11, 12} The importance of ongoing support has gained increased recognition in the form of the National Standards for Diabetes Self-Management Education and Support as well the need to address individualized patient needs including those of a variety of underserved populations.¹⁰ Towards this end, greater engagement of community health workers, health navigators, and peer supporters is taking place.^{10, 13-18} These individuals can help develop important linkages between persons with diabetes, the healthcare system, and surrounding community resources.¹³

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.^{5, 10, 19} Within this specialty, education, training, and experience will contribute to a range of competency levels.⁵ 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.²⁰⁻²²

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.²³⁻²⁵ 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.^{26, 27}

The revised levels of practice are provided in Tables 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.^{24, 25} 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.^{26, 27} 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.^{26, 27} 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,¹ 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.^{13, 14, 28, 29} 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 3a). Domain I addresses the foundational knowledge of diabetes. It includes

diabetes pathophysiology, epidemiology, and clinical guidelines. Domain II encompasses the competencies needed to provide culturally competent, supportive care across the lifespan. Domain III focuses on aspects of teaching and learning and behavior change. The competencies in this domain include a focus on Healthy Coping and Problem Solving, two self-care behaviors identified in the AADE7™.^{5, 30} Domain IV identifies the competencies required to provide effective DSME. It incorporates the remaining five self-care behaviors of the AADE7™.^{5, 30} Domain V is focused on program and business management. Competencies in this domain enable the educator to create a climate that supports successful self-management of diabetes. These competencies are applicable to diabetes educators at all levels because they serve as a framework to assist the educator to define the knowledge, skills and abilities needed to function effectively at his or her level and can also be used to identify the content needed for further professional development (Table 3b).

The competencies identified in this document have been developed to reflect the knowledge and skills needed by providers at various levels across the continuum of care. However, it is important to recognize that this attempt at articulating core competencies is based on a review of the literature and subsequent consensus development. These competencies can provide a framework for providers assisting with and/or moving into the field of diabetes education and management. They should also serve as a basis for research to further define the knowledge, skills, and abilities needed by diabetes information and education providers at various levels across the continuum.

Table 1: Diabetes Educator Provider Levels

	Diabetes Educator Level 1	Diabetes Educator Level 2	Diabetes Educator Level 3
Educational Background	<p>Level 1 educators are healthcare providers who interact professionally with diabetes patients to provide the essential knowledge and skills needed for safe self-care.</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>Level 3 educators are advanced level experts in diabetes education, clinical management and/or research.</p> <p>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.</p>
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	<p>Competencies for Diabetes Educators</p> <p>Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators</p> <p>The educator's focus is on transmitting knowledge related to essential skills for safe, self-management</p>	<p>Competencies for Diabetes Educators</p> <p>Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators</p> <p>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.</p>	<p>Competencies for Diabetes Educators</p> <p>Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators</p> <p>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,</p> <p>Focused and/or complete clinical and educational assessments are used to guide decision-making.</p> <p>Develop management materials and policies</p>
Non-Diabetes Foundational Skills for the Delivery of Diabetes Education	<p>Bloom's taxonomy: Remembering, Understanding, Applying</p> <p>Teaching & Learning Skills: Pre-processed delivery models</p>	<p>Bloom's taxonomy: Applying, Analyzing Evaluating</p> <p>Teaching & Learning Skills: Individualized assessment & delivery Educator facilitated group discussion. Differentiate teaching from learning objectives</p>	<p>Bloom's taxonomy: Analyzing, Evaluating, Creating</p> <p>Teaching & Learning Skills: Creative, Individualized teaching for self-management. Developing and evaluating new models of education</p>
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	<p>Level 1 educators are healthcare providers who interact professionally with diabetes patients to provide the essential knowledge and skills needed for safe self-care.</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>Level 3 educators are advanced level experts in diabetes education, clinical management and/or research.</p> <p>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.</p>
Educator/Clinician Level of Practice	<p>Beginner/Advanced Beginner Basic</p>	<p>Competent/Proficient Intermediate</p>	<p>Expert Advanced level</p>

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

Table 2: Associate Diabetes Educator Provider Levels

	Associate Diabetes Educator Level 1	Associate Diabetes Educator Level 2
Background and Criteria	<p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p>
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	<p>Competencies for Diabetes Educators</p> <p>Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators</p> <p>Minimal knowledge Practical problem solving Advocacy</p>	<p>Competencies for Diabetes Educators</p> <p>Scope of Practice, Standards of Practice, and Standards of Professional Performance for Diabetes Educators</p>

Table 3a: Competencies for Diabetes Educators

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

Table 3b: Competencies for Diabetes Educators

Notes: It is assumed that competency requirements are cumulative throughout the levels for both the Diabetes Educators levels and the Associate Diabetes Educator levels

In tables below PWD/PWDs = Persons with diabetes

Domain I: Pathophysiology, Epidemiology, and Clinical Guidelines of Diabetes	
Competency: Demonstrates familiarity with pathophysiology, epidemiology, and clinical guidelines consistent with diabetes care provider level	
Level	Objectives
Associate Diabetes Educator, Level 1	Pathophysiology <ol style="list-style-type: none"> 1. Identifies differences between the types of diabetes (type 1, type 2, prediabetes, and gestational diabetes) 2. States signs and symptoms of acute hyperglycemia 3. Lists signs and symptoms of hypoglycemia and DKA (major acute complications) 4. Identifies risk for common complications of diabetes (e.g., eye, nerve, kidney, etc.)
	Epidemiology of Diabetes Disease State <ol style="list-style-type: none"> 1. Recognizes local prevalence of diabetes 2. Identifies characteristics of high-risk populations 3. Participates in community screening events 4. Encourages PWD to seek healthcare for annual screening and/or for symptomatic hyperglycemia
	Clinical Practice Guidelines <ol style="list-style-type: none"> 1. Demonstrates familiarity with the AADE7™ Self-Care Behaviors™ framework 2. Articulates the clinical practice guidelines and diagnostic criteria 4. Makes referrals to qualified diabetes educators/care providers as indicated by PWD signs, symptoms, and status 5. Provides information consistent with diabetes care provider diagnosis and information
Associate Diabetes Educator, Level 2	Pathophysiology <ol style="list-style-type: none"> 1. Identifies common risk factors for the development of the acute complications of diabetes
	Epidemiology of Diabetes Disease State <ol style="list-style-type: none"> 2. Facilitates referrals for diabetes care and education
	Clinical Practice Guidelines <ol style="list-style-type: none"> 1. Uses knowledge of referral process and recommended health screenings (e.g., A1C, cholesterol, etc.)
Diabetes Educator, Level 1	Pathophysiology <ol style="list-style-type: none"> 1. Describes normal glucose metabolism 2. Differentiates between the common types of diabetes mellitus

	<ol style="list-style-type: none"> 3. Explains pathophysiologic mechanisms responsible for the development of type 1, type 2, and gestational diabetes 4. Identifies common risk factors for the development of the acute complications of diabetes
	<p>Epidemiology of Diabetes Disease State</p> <ol style="list-style-type: none"> 1. Identifies PWD groups at risk for chronic complications 2. Conducts community screening events 3. Facilitates referrals for diabetes care and education
	<p>Clinical Practice Guidelines</p> <ol style="list-style-type: none"> 1. Uses principles of evidence-based practice to guide professional practice 2. Adheres to established clinical practice guidelines in a variety of PWD care settings 3. Participates in the evaluation of program, unit, or agency using clinical practice guidelines 4. Updates agency-specific policies and procedures in accordance with established guidelines
Diabetes Educator, Level 2	<p>Pathophysiology</p> <ol style="list-style-type: none"> 1. Outlines the pathophysiology of gestational diabetes and its relationship to the development of type 2 diabetes 2. Describes the pathophysiologic basis of hypoglycemia, DKA, and HHS 3. Uses data from research studies to analyze the relationship between chronic hyperglycemia and the development of chronic complications 4. Relates particular signs and symptoms to specific long-term complications of uncontrolled diabetes 5. Differentiates between common and atypical diabetes disease states 6. Explains pathophysiology of diabetes to non-specialist providers
	<p>Epidemiology of Diabetes Disease State</p> <ol style="list-style-type: none"> 1. Defines community 2. Assesses community and plans for appropriate screening events 3. Facilitates diabetes education referral networks on a community and/or regional level 4. Serves as a diabetes education referral resource on a community and/or regional level
	<p>Clinical Practice Guidelines</p> <ol style="list-style-type: none"> 1. Implements evidence-based clinical practice guidelines to provide diabetes education in a variety of PWD care settings 2. Examines agency-specific policies and procedures for consistency with established guidelines 3. Critically appraises current diabetes-related research for use in practice 4. Applies clinical practice guidelines to the evaluation of program, unit, or agency 5. Serves as a resource for evidence-based clinical practice guidelines in diabetes education for implementation in a variety of PWD care settings 6. Evaluates diabetes education and care delivery according to appropriate clinical practice guidelines

	<ul style="list-style-type: none"> 7. Assists agencies to develop or revise diabetes education policies and procedures for consistency with established guidelines 8. Examines current trends from diabetes research for application to practice
Diabetes Educator, Level 3	<p>Pathophysiology</p> <ul style="list-style-type: none"> 1. Synthesizes knowledge of diabetes pathophysiology to direct diabetes education and/or diabetes care delivery
	<p>Epidemiology of Diabetes Disease State</p> <ul style="list-style-type: none"> 1. Uses comprehensive knowledge of diabetes to provide clinical expertise to others on the healthcare team 2. Develops and conducts or participates in diabetes-related research activities according to educational preparation
	<p>Clinical Practice Guidelines</p> <ul style="list-style-type: none"> 1. Applies knowledge of the best available evidence to assist in the review and / or development of clinical practice guidelines 2. Facilitates coordination and communication with primary care providers, diabetes care team, and other members of the PWD's network as appropriate 3. Serves as referral resource and role model for DSME processes 4. Applies knowledge of current established criteria, diagnoses diabetes, identifies early complications, and refers to appropriate care providers for follow-up 5. Updates knowledge of research findings and treatment innovations (new position statements and consensus meeting reports) on a continuous basis
<p>Domain II: Culturally-Competent Supportive Care Across the Lifespan Competency: Provides diabetes support and care in a culturally-competent manner across the lifespan</p>	
Associate Diabetes Educator, Level 1	<p>Objectives</p>
	<p>Lifespan</p> <ul style="list-style-type: none"> 1. Identifies and refers high-risk and/or PWDs with unstable diabetes to diabetes care providers 2. Encourages use of family and community support systems 3. Identifies support systems
	<p>Culture</p> <ul style="list-style-type: none"> 1. Acknowledges that attitudes about health and health management vary across cultures 2. Promotes learning experience in a culturally-appropriate manner 3. Works with diabetes care providers to identify and overcome cultural barriers to self-care or behavior change 4. Conveys diabetes self-management information and healthcare provider recommendations accurately to PWD 5. Provides culturally-specific basic health information 6. Identifies potential barriers to self-care for PWDs who have physical or cognitive disabilities

Associate Diabetes Educator, Level 2	<p>Lifespan</p> <ol style="list-style-type: none"> 1. Identifies prevalence of diabetes across the lifespan (e.g., pediatrics, pregnancy, older adults)
	<p>Culture</p> <ol style="list-style-type: none"> 1. Identifies potential educational materials consistent with PWD's age, literacy level, cultural or ethnic background, and physical or cognitive disabilities
Diabetes Educator, Level 1	<p>Lifespan</p> <ol style="list-style-type: none"> 1. Identifies prevalence of diabetes across the lifespan (e.g., pediatrics, pregnancy, older adults) 2. Provides evidenced-based and national standards of diabetes care to PWDs across the lifespan 3. Assesses PWD support systems 4. Develops community coalitions to meet the needs of a specific population
	<p>Culture</p> <ol style="list-style-type: none"> 1. Selects educational materials consistent with PWD's age, literacy level, cultural or ethnic background, and physical or cognitive disabilities
Diabetes Educator, Level 2	<p>Lifespan</p> <ol style="list-style-type: none"> 1. Uses age-appropriate theories for information, application, health, and chronic disease self-management education 2. Assists PWDs to develop coping skills appropriate for chronologic and developmental age 3. Identifies effective community support systems 4. Acknowledges relationship between rising rates of obesity and diabetes throughout the life cycle 5. Assists other healthcare providers to develop and apply age-appropriate teaching strategies 6. Assesses local and regional communities to establish effective support networks for PWDs with diabetes 7. Explains the relationship between rising rates of obesity and diabetes throughout the life cycle
	<p>Culture</p> <ol style="list-style-type: none"> 1. Assesses impact of social, economic, and cultural aspects / circumstances 2. Ensures that DSME is provided in a culturally-competent fashion 3. Works with community groups to meet the needs of specific cultural populations and remove barriers 4. Models culturally-competent behavior to healthcare team members
Diabetes Educator, Level 3	<p>Lifespan</p> <ol style="list-style-type: none"> 1. Promotes safe management of diabetes for PWDs across the lifespan 2. Provides education to healthcare providers, clinical groups, professionals, paraprofessionals, and the public at large 3. Assesses and establishes effective support networks for PWDs with diabetes in the local, state, and regional communities

	<p>Culture</p> <ol style="list-style-type: none"> Promotes cultural competence into all aspects of PWD and healthcare provider encounters Creates and disseminates educational programs and materials to address different cultural needs Works to eliminate healthcare disparities in vulnerable populations
<p>Domain III: Teaching and Learning Skills Competency: Applies principles of teaching and learning and/or behavior change to facilitate self-management skills of individuals with diabetes</p>	
Level	Objectives
Associate Diabetes Educator, Level 1	<p>Teaching and Learning</p> <ol style="list-style-type: none"> Reinforces information provided by qualified diabetes professionals Conveys educational materials to PWDs accurately Assists clients to acquire accurate diabetes educational materials Assists with skill development Provides ongoing coaching skills to PWDs with self-management of a chronic, changing condition Refers questions to appropriate team member Uses elements of the AADE7 Self-Care Behaviors™ framework in working with diabetes PWDs Identifies basic literacy, numeracy, physical or cognitive barriers. Assists with addressing language barriers.
	<p>Behavior Change</p> <ol style="list-style-type: none"> Works with healthcare team using basic concepts of behavior change to assist PWD with effective self-management Assists PWD to set initial self-management goals Supports PWD’s efforts to make changes in daily routine Serves as a link between PWD and diabetes healthcare team
Associate Diabetes Educator, Level 2	<p>Teaching and Learning</p> <ol style="list-style-type: none"> Demonstrates how to use adult learning techniques/participatory teaching in class activities.
	<p>Behavior Change</p> <ol style="list-style-type: none"> Able to recognize levels of readiness to change. Demonstrate skills to build trust and relationships with PWD.
Diabetes Educator, Level 1	<p>Teaching and Learning</p> <ol style="list-style-type: none"> Identifies and incorporates principles of adult and/or child learning theories, barriers to learning, and instructional strategies Teaches, reinforces, or validates essential diabetes self-management skills (survival skills) using principles of teaching and learning Focuses on knowledge and basic skill acquisition for safe self-management
	<p>Behavior Change</p> <ol style="list-style-type: none"> Identifies and incorporates a variety of different frameworks useful for promoting behavior change Identifies potential utility of the AADE7 Self-Care Behaviors™ framework Applies basic motivational interviewing skills to assist PWD in

	<p>appropriate and measureable goal setting (i.e., implements behavioral goal plan for PWD)</p> <p>4. Identifies potential barriers to self-management</p>
<p>Diabetes Educator, Level 2</p>	<p>Teaching and Learning</p> <ol style="list-style-type: none"> 1. Assesses PWD’s diabetes self-management education needs, attitude toward learning, and preferred learning style 2. Assesses PWD’s readiness for and barriers to learning 3. Develops basic plan related to acquiring necessary diabetes management skills based on needs identified in assessment 4. Applies fundamental principles of adult and/or child learning theories and instructional strategies to provide essential DSME for PWDs with chronic, stable diabetes mellitus 5. Expands on knowledge and basic skill acquisition with continued focus on survival skills and greater attention to more complex self-management tasks 6. Assesses health literacy, barriers to learning, and readiness to learn 7. Uses AADE7 Self-Care Behaviors™ instructional strategies in curriculum and materials development 8. Identifies a learning framework, appropriately applying it to the learning environment within home, work, school, and institutional settings 9. Assesses for motivation and readiness to learn and make behavior changes 10. Assesses diabetes self-management skills and knowledge of diabetes 11. Assesses attitude toward learning and preferred learning style 12. Develops an educational plan to address behavioral goals established in the goal-setting process 13. Develops a learning plan to address gaps in knowledge 14. Recommends and executes plan, and ensures PWD has the knowledge, skills, and resources necessary to follow through on the plan (i.e., implements and evaluates the education plan with the PWD) <p>Behavior Change</p> <ol style="list-style-type: none"> 1. Assesses PWD’s readiness to change 2. Assists PWDs to identify barriers to change 3. Demonstrates familiarity with skills, techniques, and strategies to facilitate behavior change and to assist PWDs with individualized goal setting and evaluation 4. Identifies variety of different frameworks useful for promoting behavior change 5. Develops, implements, and evaluates behavioral goal plan using selected frameworks 6. Guides PWD in setting and prioritizing individualized behavioral goals based upon assessment and preference 7. Develops success metrics 8. Begins situational problem-solving using more advanced thinking skills 9. Applies theories of behavior change and behavior change

	<p>methodology (e.g., motivational interviewing, cognitive therapy, etc.) to support effective diabetes self-management</p> <ol style="list-style-type: none"> 10. Develops, implements, and evaluates behavioral goal plan 11. Focuses attention on PWD behaviors that enhance chronic disease management, quality of life changes, and planning for future 12. Assists PWD to establish realistic, meaningful self-management goals and success metrics 13. Provides clients with advanced-level demonstration, training, or resources for independent decision-making and semi-independent problem-solving 14. Identifies potential barriers to behavior change, including: cognitive and physical limitations, literacy, lack of support systems, and negative cultural influences 15. Plans strategies for addressing barriers identified 16. Initiates situational problem-solving and more advanced thinking
Diabetes Educator, Level 3	<p>Teaching and Learning</p> <ol style="list-style-type: none"> 1. Applies knowledge of age-specific learning principles, health literacy, and behavior change theory to develop effective DSME programs 2. Serves as a resource in curriculum and program development, design, and evaluation
	<p>Behavior Change</p> <ol style="list-style-type: none"> 1. Promotes behavior change as the unique outcome of DSME 2. Fluidly shifts among approaches to meet evolving PWD challenges
<p>Domain IV: Self-Management Education Competency: Works with an interdisciplinary diabetes care team to tailor interventions to individual PWD self-management education needs</p>	
Level	Objectives
Associate Diabetes Educator, Level 1	<p>Healthy Eating</p> <ol style="list-style-type: none"> 1. Facilitates access to community resources for DSME and MNT 2. Reviews general principles of healthy eating
	<p>Being Active</p> <ol style="list-style-type: none"> 1. Communicates the importance of physical activity in diabetes management and prevention 2. Reinforces fitness prescription 3. Provides and communicates safety guidelines
	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Demonstrates correct techniques in basic blood glucose (BG), blood pressure (BP), weight (wt), height (ht), waist circumference, body mass index (BMI), and A1C measurements 2. Identifies metabolic results (e.g., A1C, BG, BP, wt, ht, waist circumference, BMI, and ketone testing) that are out-of-target range, requiring referral 4. Reinforces recommended metabolic targets (e.g., A1C, BG, BP, wt, ht, waist circumference, BMI, and ketone testing) for control to PWD 5. Identifies barriers interfering with monitoring (e.g., SMBG, lab values, and expiration date) 6. Assists PWD to develop and maintain a personal health record

	<p>Taking Medications</p> <ol style="list-style-type: none"> 1. Identifies common oral blood glucose-lowering agents and injectable therapies 2. Identifies barriers interfering with PWD taking medication as prescribed. 3. Teaches and reinforces medication adherence and safe disposal of sharps, use of medical alert IDs)
	<p>Reducing Risk</p> <ol style="list-style-type: none"> 1. Identifies signs and symptoms of acute and chronic complications of diabetes and refers to healthcare provider as appropriate 2. Reinforces the need for basic preventative and risk reduction measures (e.g., foot exams, eye exams, dental exams, lab measurements, smoking cessation, flu vaccines, and immunizations), and makes referrals as appropriate 3. Reinforces principles of sick day management 4. Uses protocols to assist PWDs in treating hypoglycemia when needed
Associate Diabetes Educator, Level 2	<p>Healthy Eating</p> <ol style="list-style-type: none"> 1. Supports prescription for medical nutrition therapy (MNT) 2. Identifies nutrition issues needing referral
	<p>Being Active</p> <ol style="list-style-type: none"> 1. Identifies potential barriers and facilitators of a personal activity plan
	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Reinforces value and prescribed frequency of monitoring, e.g., self-monitoring of blood glucose (SMBG), lab values, and risk assessments 2. Identifies barriers (e.g., SMBG, lab values, expiration date, poor technique, and risk assessments)
	<p>Taking Medications</p> <ol style="list-style-type: none"> 1. Identifies barriers interfering with PWD taking medication as prescribed and makes referrals as needed (i.e., notifies prescriber) 2. Teaches insulin preparation and injection using needle and syringe, under the supervision of a licensed healthcare provider 3. Teaches and reinforces safe use of medications
	<p>Reducing Risk</p> <ol style="list-style-type: none"> 1. Accurately performs basic foot exam 2. Calls for emergency help in response to severe hypoglycemia and in cases of DKA
Diabetes Educator, Level 1	<p>Healthy Eating</p> <ol style="list-style-type: none"> 1. Assesses meal plan and nutritional components of PWD’s lifestyle 2. Introduces PWDs to principles of healthful eating 3. Instructs PWD about elements of the diabetes meal plan 4. Provides instruction on hypoglycemia prevention, identification, and treatment
	<p>Being Active</p> <ol style="list-style-type: none"> 1. Assists PWD to assess barriers and facilitators of a personal activity plan 2. Provides guidelines for a safe activity plan to the PWD with

	<p>uncomplicated diabetes (e.g., exercise timing, intensity, appropriate shoes, and prevention of hypoglycemia)</p>
	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Demonstrates correct use of blood glucose meters commonly used in facility or agency 2. Defines rationale for target glucose ranges 3. Explains frequency of testing 4. Assists PWDs to develop appropriate monitoring schedule 5. Describes correct use of ketone monitoring 6. Discusses plan for contacting diabetes healthcare provider 7. Clarifies PWD skill accuracy in performing SBGM, continuous glucose monitoring (CGM), etc. 8. Teaches, reinforces, and validates survival skills (e.g., monitoring, medicines, etc.)
	<p>Taking Medications</p> <ol style="list-style-type: none"> 1. Explains and delineates with oral and injectable medications for diabetes and co-morbid conditions 2. Teaches PWD to identify common side effects and adverse reactions 3. Works with prescriber to ensure PWD understands the need to obtain and take prescribed medications as directed 4. Instructs PWD in safe and correct preparation and injection technique using vial and syringe or pre-filled pen devices 5. Teaches PWD to identify correct site selection and rotation patterns, insulin storage, and safe syringe disposal 6. Explains and discusses safe and appropriate use of medications
	<p>Reducing Risk</p> <ol style="list-style-type: none"> 1. Describes basic knowledge of diabetes risk and strategies for reducing risk 2. Recognizes and describes common complications
Diabetes Educator, Level 2	<p>Healthy Eating</p> <ol style="list-style-type: none"> 1. Provides instruction about nutrition as a framework to guide PWD toward successful management of personal meal plans 2. Assesses PWD's ability to follow complex meal plan 3. Provides instruction on completing a food record 4. Introduces fundamental concepts of carbohydrate counting and meal-based insulin dosing 5. Explains the relationship between food, activity, and medication in preventing hypoglycemia 6. Explains interaction of food, activity, and medication 7. Uses SMBG results to assess food intake and develop intervention or referral 8. Assists PWDs to recognize and address challenges in following food plan 9. Assesses PWDs for psychosocial adjustment, including coping strategies and eating disorders 10. Performs physical assessment relative to healthy eating 11. Evaluates lab and diagnostic test results relative to nutritional status

	<p>Being Active</p> <ol style="list-style-type: none"> 1. Explains physiological responses that occur during physical activity for all types of diabetes at different blood glucose levels 2. Collaboratively develops an individualized activity plan with the PWD with an emphasis on self-management training for physical activity (including management of complications, self-glucose monitoring, and nutrition) 3. Develops a plan that accommodates variations in routine (e.g., changes in medication and/or meal plan for competitive sports, marathons, etc.) 4. Applies clinical strategies to minimize risks associated with physical activity
	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Possesses ability to demonstrate correct use of all blood glucose meters common to geographic area/location 2. Serves as local resource on monitoring-related issues 3. Verifies PWD's monitoring technique 4. Assists PWDs with monitoring-related problem solving 5. Works with PWD and diabetes care team to develop appropriate monitoring schedule 6. Assists PWD to analyze blood glucose values to explain variations in intake or exercise 7. Uses results of A1C (or equivalent) to reinforce teaching 8. Discusses value of monitoring during periods of illness (i.e., sick day monitoring strategies) 9. Focus on intermediate level skill building, pattern control, CGM or pump consideration, and interpretation 10. Determines PWD-specific use of pre- and post-meal monitoring to achieve and maintain A1C goals 11. Assists uncomplicated PWDs with advanced pattern management skills
	<p>Taking Medications</p> <ol style="list-style-type: none"> 1. Uses information about common oral and injectable medications for diabetes and co-morbid conditions (i.e., focus is on understanding the relationship between food, exercise, and medications) 2. Instructs PWD to safely and correctly prepare and inject insulin using vial and syringe or commonly used insulin pen methods 3. Explains and uses correct site selection and rotation technique 4. Develops algorithm or protocol-based medication adjustments for changes in meal plan or exercise 5. Educates and instructs PWD in making drug dosage adjustments using monitoring results 6. Uses knowledge and understanding of complementary and alternative medicine (CAM) therapy to discuss impact of these on glucose levels 7. Initiates insulin pump therapy with selected PWDs 8. Advises on use of over-the-counter (OTC) medications and supplements

	<p>9. Educates on diabetes-specific and related medication use (i.e., insulin-to-carbohydrate ratios)</p>
	<p>Reducing Risk</p> <ol style="list-style-type: none"> 1. Assesses PWD’s knowledge and skills used to reduce diabetes related risks 2. Clarifies PWD’s skill accuracy in performing self-blood glucose monitoring and CGM 3. Teaches, reinforces, and validates survival skills, monitoring, medicines, etc. 4. Screens for acute and long-term complications 5. Instructs other members of the healthcare team in proper recognition and treatment of hypoglycemia 6. Develops an educational plan based on assessment of diabetes risk and strategies for reducing risk 7. Assesses for psychosocial adjustment, including coping strategies and eating disorders 8. Screens for signs and symptoms of depression
Diabetes Educator, Level 3	<p>Healthy Eating</p> <ol style="list-style-type: none"> 1. Uses comprehensive knowledge of nutrition and diabetes meal planning to provide (or support) MNT to PWDs with complex needs. 2. Assesses insulin-to-carbohydrate ratio (i.e., must know if food portions are accurate) 3. Assess for psychosocial adjustment, including coping strategies and eating disorders 4. Performs physical assessment, including signs of malnutrition and anthropometrics 5. Performs clinical assessment, including relevant lab values 6. Assesses for food/drug interactions 7. Reviews food intake in detail to assess accuracy of portions and specific carbohydrate intake or refers to a registered dietitian (RD)
	<p>Being Active</p> <ol style="list-style-type: none"> 1. Evaluates and develops a comprehensive health assessment for exercise (e.g., stress testing, etc.) to reduce risk factors (e.g., cardiovascular disease (CVD), weight management, etc.) 2. Develops activity plans for PWDs with complicated diabetes or those who are competitive athletes 3. Identifies stages in adoption and use of a fitness plan 4. Implements strategies to enable appropriately self-directed fitness plan
	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Collaborates with diabetes care team to develop and use effective monitoring strategies for diabetes PWDs 2. Evaluates use of CGM records to achieve and maintain goals in high-risk PWDs
	<p>Taking Medications</p> <ol style="list-style-type: none"> 1. Explains and discusses complex medication therapy management of diabetes and its complications

	<ol style="list-style-type: none"> 2. Works with high-risk PWDs to achieve and maintain optimal glucose control 3. Assists PWDs with advanced pump therapy 4. Assists with advanced pattern management skills in complicated PWDs 5. Instructs healthcare professionals in various levels of pattern management 6. Assesses for use of OTC medications and supplements 7. Assesses for diabetes-specific and related medication use (i.e., insulin-to-carbohydrate ratios)
	<p>Reducing Risk</p> <ol style="list-style-type: none"> 1. Executes and evaluates an educational plan based on assessment of diabetes complications risk and strategies for reducing risk 2. Probes for emotional and/or physical factors linked to depression and treats with counseling, medication, and/or referral as appropriate
<p>Domain V: Program and Business Management Competency: Applies principles of program and/or business management to create a climate that supports successful self-management of diabetes</p>	
Level	Objectives
Associate Diabetes Educator, Level 1	<p>Program Management</p> <ol style="list-style-type: none"> 1. Identifies and explains the roles and functions of the members of the healthcare team 2. Works (i.e., functions) under the direction of a qualified diabetes care provider according to agency protocols 3. Serves as a resource to PWDs with diabetes to assist with access to all elements of healthcare system 4. Acts as conduit between PWD and healthcare team when necessary and appropriate 5. Follows facility or organization policy and procedures: HIPAA, safety, communication and attendance. 6. Develop community network skills to help market program. 7. Participate in program evaluation activities and quality improvement activities.
	<p>Business Management</p> <ol style="list-style-type: none"> 1. Articulates the impact of diabetes self-management training on healthcare economy 2. Demonstrates basic computer skills for email, data entry, web conferencing, diabetes-related mobile applications, as well as other audio-visual skills 3. Demonstrates priority and time management skills.
Associate Diabetes Educator, Level 2	<p>Program Management</p> <ol style="list-style-type: none"> 1. Keeps aware of all aspects of PWD care consistent with laws and regulations governing professional discipline 2. Keeps aware of agency changes in diabetes-related policies, procedures, and equipment

	<p>Business Management</p> <ol style="list-style-type: none"> 1. Demonstrates ability to identify reputable sources of diabetes information on Internet and in general media sources that a PWD may be accessing
<p>Diabetes Educator, Level 1</p>	<p>Program Management</p> <ol style="list-style-type: none"> 1. Integrates all aspects of PWD care consistent with laws and regulations governing professional discipline 2. Functions as a member of the interdisciplinary diabetes care team 3. Values the unique contributions of all team members 4. Communicates effectively and in a timely manner with PWDs, families, and colleagues 5. Open to learning, being coached, or mentored 6. Keeps informed about agency changes in diabetes-related policies, procedures, and equipment 7. Plans for follow-up and initiates referrals to secure appropriate services for PWD and family
	<p>Business Management</p> <ol style="list-style-type: none"> 1. Uses resources in a cost-effective manner 2. Identifies sources to assist PWDs with acquisition of supplies and/or medications 3. Provides appropriate documentation to employers, schools, and government entities according to all relevant laws and guidelines
<p>Diabetes Educator, Level 2</p>	<p>Program Management</p> <ol style="list-style-type: none"> 1. Demonstrates initiative in implementing a plan for effectively managing a diabetes education program 2. Implements care using the typical strategies and resources available for problem solving 3. Collaborates with all members of the healthcare team to provide for needed changes in the PWD's plan of care 4. Uses evidence to guide the delivery of diabetes care and education 5. Assists with the development, selection, or evaluation of diabetes-related resources 6. Identifies patterns of behavior among staff requiring conflict management 7. Directs and/or manages all aspects of a diabetes education program 8. Incorporates program strategies that lead an interdisciplinary care team toward achievement of optimal PWD and family outcomes 9. Develops and integrates a variety of problem-solving strategies aimed at improving diabetes self-management for individuals and families 10. Anticipates, plans for, and manages PWD transitions within the healthcare system to ensure care continuity 11. Displays creativity to find and use healthcare resources to meet expected and unanticipated PWD needs 12. Develops, selects, and evaluates resources for use within agency 13. Serves as a role model of leadership, effective communication, and

	<p>collaboration to the interdisciplinary/multi-professional care team</p> <ol style="list-style-type: none"> 14. Provides coaching and/or mentorship to other members of the diabetes care team 15. Identifies areas of research need and assists with diabetes-related research
	<p>Business Management</p> <ol style="list-style-type: none"> 1. Works with other agency staff to evaluate safety, effectiveness, and cost relative to diabetes-related materials and equipment 2. Uses expertise in application of sound judgment to decisions related to resource acquisition and use 3. Applies business management processes to create and manage a diabetes education program 4. Identifies system failures and inefficiencies 5. Uses principles of CQI to seek opportunities to improve quality and efficiency of program services 6. Balances competing demands on time and financial resources
<p>Diabetes Educator, Level 3</p>	<p>Program Management</p> <ol style="list-style-type: none"> 1. Appraises and evaluates program management competencies (e.g., problem-solving, interpersonal effectiveness, and organizational awareness) among staff and healthcare providers in a diabetes education program 2. Promotes a culture of collegiality that enables members of the multidisciplinary team to feel respected and valued 3. Designs innovative strategies to improve program effectiveness and enhance care continuity 4. Analyzes the current system; recognizes system failures and develops strategies for improvement 5. Works toward improving population-based interventions 6. Mentors other members of the diabetes care team 7. Serves as consultant for development, assessment of program evaluation, and documentation
	<p>Business Management</p> <ol style="list-style-type: none"> 1. Provides leadership in system design 2. Uses principles of business management to plan, develop, and execute successful programming 3. Uses principles of human resource development and planning to create and effectively manage groups of people

References

1. National Diabetes Statistics Report, 2014.
<http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>
Accessed September 26, 2014
2. Chen L, Magliano DJ and Zimmet PZ. The worldwide epidemiology of type 2 diabetes mellitus-- present and future perspectives. *Nature reviews Endocrinology*. 2012; 8: 228-36.
3. Funnell MM. Peer-based behavioural strategies to improve chronic disease self-management and clinical outcomes: evidence, logistics, evaluation considerations and needs for future research. *Family practice*. 2010; 27 Suppl 1: i17-22.
4. Duke SA, Colagiuri S and Colagiuri R. Individual patient education for people with type 2 diabetes mellitus. *The Cochrane database of systematic reviews*. 2009: CD005268.
5. Burke SD, Sherr D and Lipman RD. Partnering with diabetes educators to improve patient outcomes. *Diabetes, metabolic syndrome and obesity : targets and therapy*. 2014; 7: 45-53.
6. Marrero DG, Ard J, Delamater AM, et al. Twenty-first century behavioral medicine: a context for empowering clinicians and patients with diabetes: a consensus report. *Diabetes care*. 2013; 36: 463-70.
7. Kent D, D'Eramo Melkus G, Stuart PM, et al. Reducing the risks of diabetes complications through diabetes self-management education and support. *Population health management*. 2013; 16: 74-81.
8. Duncan I, Ahmed T, Li QE, et al. Assessing the value of the diabetes educator. *The Diabetes educator*. 2011; 37: 638-57.
9. Renders CM, Valk GD, Griffin SJ, Wagner EH, Eijk Van JT and Assendelft WJ. Interventions to improve the management of diabetes in primary care, outpatient, and community settings: a systematic review. *Diabetes care*. 2001; 24: 1821-33.
10. Haas L, Maryniuk M, Beck J, et al. National standards for diabetes self-management education and support. *Diabetes care*. 2014; 37 Suppl 1: S144-53.
11. Martin AL, Warren JP and Lipman RD. The landscape for diabetes education: results of the 2012 AADE National Diabetes Education Practice Survey. *The Diabetes educator*. 2013; 39: 614-22.
12. Martin AL and Lipman RD. The future of diabetes education: expanded opportunities and roles for diabetes educators. *The Diabetes educator*. 2013; 39: 436-46.
13. Funnell MM, Brown TL, Childs BP, et al. National Standards for diabetes self-management education. *Diabetes care*. 2011; 34 Suppl 1: S89-96.
14. Norris SL, Chowdhury FM, Van Le K, et al. Effectiveness of community health workers in the care of persons with diabetes. *Diabetic medicine : a journal of the British Diabetic Association*. 2006; 23: 544-56.
15. Nelson K, Drain N, Robinson J, et al. Peer Support for Achieving Independence in Diabetes (Peer-AID): Design, methods and baseline characteristics of a randomized controlled trial of community health worker assisted diabetes self-management support. *Contemporary clinical trials*. 2014.
16. Hunt CW and Grant JS. Community health advisors in diabetes care. *The American journal of nursing*. 2012; 112: 63-8.
17. Tang TS, Funnell M, Sinco B, et al. Comparative effectiveness of peer leaders and community health workers in diabetes self-management support: results of a randomized controlled trial. *Diabetes care*. 2014; 37: 1525-34.
18. Siminerio L, Ruppert KM and Gabbay RA. Who can provide diabetes self-management support in primary care? Findings from a randomized controlled trial. *The Diabetes educator*. 2013; 39: 705-13.
19. What is diabetes education? <http://www.diabeteseducator.org/DiabetesEducation/Definitions.html>
Accessed September 26, 2014.

20. The National Certification Board for Diabetes Educators. <http://www.ncbde.org/> Accessed September 26, 2014.
21. Board Certified - Advanced Diabetes Management Certification. <http://www.diabeteseducator.org/ProfessionalResources/Certification/BC-ADM/> Accessed September 26, 2014.
22. Diabetes Technology Society. <http://cdtccertification.org/> Accessed September 26, 2014.
23. Kulkarni K, Boucher JL, Daly A, et al. American Dietetic Association: Standards of practice and standards of professional performance for registered dietitians (generalist, specialty, and advanced) in diabetes care. *Journal of the American Dietetic Association*. 2005; 105: 819-24.
24. Dreyfuss HL. *Mind over Machine: The power of human intuitive expertise in the era of the computer*. New York: Free Press; 1986.
25. Benner P. *From novice to expert: Excellence and power in clinical nursing practice*. Upper Saddle River, NJ: Prentice-Hall; 2001.
26. Bloom BJE, M S, Furst EJ, Hill WH, Krathwohl DR. Taxonomy of educational objectives: The classification of educational goals, Handbook 1: Cognitive domain. New York, NY: David McKay; 1956.
27. Krathwohl DR, Bloom BJ, Masia BB. Taxonomy of educational objectives: The classification of educational goals, Handbook II: The affective domain. New York, NY: David McKay; 1964.
28. Ruggiero L, Riley BB, Hernandez R, et al. Medical Assistant Coaching to Support Diabetes Self-Care Among Low-Income Racial/Ethnic Minority Populations: Randomized Controlled Trial. *Western journal of nursing research*. 2014.
29. Walker EA, Stevens KA and Persaud S. Promoting diabetes self-management among African Americans: an educational intervention. *Journal of health care for the poor and underserved*. 2010; 21: 169-86.
30. AADE7 Self Care Behaviors™. <http://www.diabeteseducator.org/ProfessionalResources/AADE7/> Accessed September 26, 2014.