

#### **AADE7<sup>TM</sup> Self-Care Behaviors**

# American Association of Diabetes Educators (AADE) Position Statement

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#### Introduction

The American Association of Diabetes Educators (AADE) has defined the AADE7 Self-Care Behaviors<sup>TM</sup> as a framework for patient centered diabetes self-management education (DSME) and care. The seven self-care behaviors essential for successful and effective diabetes self-management are:

- Healthy Eating
- Being Active
- Monitoring
- Taking Medications
- Problem Solving
- Healthy Coping
- Reducing Risks. 1-8

AADE7 Self-Care Behaviors<sup>TM</sup> (AADE7<sup>TM</sup>) provide an evidenced-based framework for assessment, intervention and outcome (evaluation) measurement of the prediabetes and diabetes patient, program, and population.<sup>9, 10</sup> In addition, diabetes educator interventions can be organized according to the framework. This position statement describes the application of the AADE7 Self-Care Behaviors<sup>TM</sup> framework in diabetes education and care.

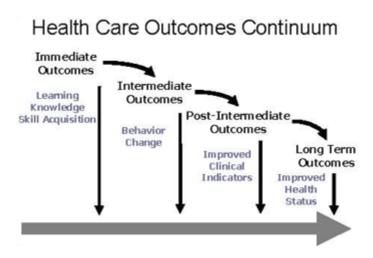
#### **Background**

In 1997, a workgroup of diabetes educators identified the seven self-care behaviors by mapping the 15 content areas of the 1995 National Standards for Diabetes

Self-Management Education (NSDSME) with a review of literature, and expert consensus.<sup>11</sup> The seven behaviors framework supported a paradigm shift in diabetes education from a content-driven practice to an outcomes-driven practice that is focused on patient centered goals for facilitating behavior change that affects clinical and health related outcomes.<sup>8, 12</sup>

AADE's 2011 Position Statement, "Standards for Outcomes Measurement of Diabetes Self-Management Education" articulates standards for outcomes measurement of DSME. The outcomes position statement directs educators to measure behavior change, as well as clinical and health status outcomes at regular intervals both pre and post intervention. DSME outcomes measurement of seven self-care behaviors is essential to determine the effectiveness of diabetes education at the individual and population levels. 9, 10, 13

Figure 1.

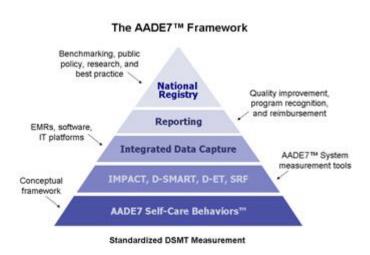


Adapted from Haas L, Maryniuk M, Beck J, et al. National standards for diabetes self-management education and support. *Diabetes Care*. 2014;37 Suppl 1:S144-153.

The continuum of healthcare outcomes is important because it acknowledges the full impact of diabetes education in the care of the person with diabetes. It is important to gather data and measure outcomes for both the individual with diabetes and for an aggregate population. Aggregate data guide program development and quality improvement efforts at the diabetes program level. The AADE7<sup>TM</sup> framework supports this by describing a full-spectrum approach. This includes the AADE7<sup>TM</sup> measurement methodology; tools and a data model that can be applied to a program and/or integrated into existing data platforms and electronic medical record (EMR) management systems; and the eventual

development of a diabetes data repository that is expected to include a diabetes educator and program registry. This approach is pictured immediately below.

Figure 2.



Adapted from Haas L, Maryniuk M, Beck J, et al. National standards for diabetes self-management education and support. *Diabetes Care*. 2014;37 Suppl 1:S144-153.

### The Importance of the AADE7 TM to DSME/T Nomenclature

The AADE7 Self-Care Behaviors<sup>TM</sup> is widely accepted as standardized nomenclature that is incorporated into the definition of diabetes education.<sup>14</sup> The action oriented terms reflect patient centered self-management and provide a common language for communication.<sup>15-18</sup> Diabetes educators are asked to account for the services and products that are delivered, as well as the effectiveness of outcomes. Although diabetes education programs are individualized, the AADE7<sup>TM</sup> provide a common framework to represent health and diabetes self-management related concepts that are frequently used to describe the process of diabetes self-management education, and are also used to describe outcomes. The use of a standardized terminology facilitates:

- 1. improved communication among health care professionals caring for the same patient, and between the patient and the diabetes care team;
- 2. the development of a knowledge base for DSME on a global level;
- 3. comparisons, research and the growth of evidenced based practice;
- 4. the ability to share information between and among practices and the development of benchmarks that help in the discovery of what constitutes best practice in the profession;

- 5. diabetes educators to have a better understanding of the practice of DSME at a global level where a single terminology can be used across regions and nations;<sup>19</sup>
- 6. communication to consumers, hospital management, and third party payers by clarifying and defining process and outcomes of DSME;
- 7. documentation to effectively measure the diabetes education process for cross-mapping to other health care related fields. 15

# The Importance of the AADE7<sup>TM</sup> in Continuous Quality Improvement and Program Evaluation

The Continuous Quality Improvement (CQI) process provides a framework for systematically measuring, monitoring and managing the behavioral outcomes of the AADE7<sup>TM</sup>.<sup>20</sup> The ultimate goal of CQI is to provide more effective and efficient services while ensuring optimal patient care. The National Standards for Diabetes Self-Management Education and Support specify that a written CQI plan describing a diabetes education program's process and outcome data be documented.<sup>12</sup> The impact of behavioral change described in the DSME Outcomes Continuum (Figure 3) best reflects how diabetes self-management education affects clinical and health related outcomes. Specifically, the National Standards for Diabetes Self-Management Education and Support call for annual CQI projects related to the assessment of behavioral outcomes for the entire population of patients served or for a representative sample. In this way, individual educators or programs can continuously assess the impact of their program as well as the progress of the program participants. Tools such as the AADE7<sup>TM</sup> System utilize the AADE7<sup>TM</sup> Self-Care Behavior framework and are designed to help educators collect and review behavioral outcome data for CQI purposes.

Figure 3.

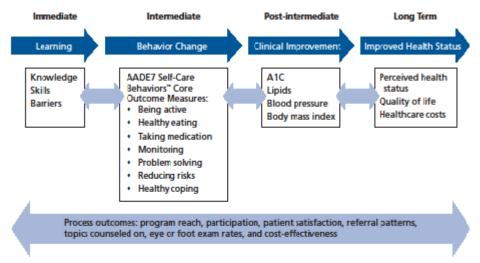


FIGURE 2.2 Diabetes Self-Management Education Outcomes Continuum

Source: Adapted from the following: K Lacey, E Pritchett, "Nutrition care process and model: ADA adopts road map to quality care and outcomes management," J Am Diet Assoc 103, no. 8 (2003): 1061-72; American Association of Diabetes Educators, "Standards for outcomes measurement of diabetes self-management education," Diabetes Educ 29 (2003): 804-16.

## **AADE Maintains the Following Positions**

- The AADE 7<sup>TM</sup> Self-Care Behavior structure has been adopted because it
  provides the necessary framework for driving the profession, allowing for
  benchmarking, setting professional standards, and universal measurement of the
  effects of diabetes educators and DSME. It also provides consistent measures for
  conducting research to provide evidence for policy makers advocating for health
  care policy.
- The AADE7<sup>TM</sup> framework is broadly applicable for use in those with prediabetes, diabetes and related chronic illnesses. Educators can use the AADE7<sup>TM</sup> to address other medical conditions because most require some education in most if not all of the 7 behaviors to assist in supporting or facilitating change of individually tailored self-care behaviors.

#### References

- 1. Boren SA, Gunlock TL, Schaefer J, et al. Reducing risks in diabetes self-management: a systematic review of the literature. *Diabetes Educ.* 2007;33(6):1053-1077; discussion 1078-1059.
- 2. Fisher EB, Thorpe CT, Devellis BM, et al. Healthy coping, negative emotions, and diabetes management: a systematic review and appraisal. *Diabetes Educ.* 2007;33(6):1080-1103; discussion 1104-1086.
- 3. Hill-Briggs F, Gemmell L. Problem solving in diabetes self-management and control: a systematic review of the literature. *Diabetes Educ.* 2007;33(6):1032-1050; discussion 1051-1032.
- 4. Kavookjian J, Elswick BM, Whetsel T. Interventions for being active among individuals with diabetes: a systematic review of the literature. *Diabetes Educ*. 2007;33(6):962-988; discussion 989-990.
- 5. McAndrew L, Schneider SH, Burns E, et al. Does patient blood glucose monitoring improve diabetes control? A systematic review of the literature. *Diabetes Educ*. 2007;33(6):991-1011; discussion 1012-1013.
- 6. Odegard PS, Capoccia K. Medication taking and diabetes: a systematic review of the literature. *Diabetes Educ.* 2007;33(6):1014-1029; discussion 1030-1011.
- 7. Povey RC, Clark-Carter D. Diabetes and healthy eating: a systematic review of the literature. *Diabetes Educ.* 2007;33(6):931-959; discussion 960-931.
- 8. Burke SD, Sherr D, Lipman RD. Partnering with diabetes educators to improve patient outcomes. *Diabetes Metab Syndr Obes.* 2014;7:45-53.
- 9. American Association of Diabetes Educators. Standards for Outcomes Measurement of Diabetes Self-Management Education Available: <a href="http://www.diabeteseducator.org/export/sites/aade/\_resources/pdf/research/Outcome\_Measurement\_Position\_Statement\_2011.pdf">http://www.diabeteseducator.org/export/sites/aade/\_resources/pdf/research/Outcome\_Measurement\_Position\_Statement\_2011.pdf</a>.
- 10. American Association of Diabetes Educators. Technical Review: Diabetes Self-Management Education and Training (DSME/T) Outcomes Measures Available: <a href="http://www.diabeteseducator.org/export/sites/aade/">http://www.diabeteseducator.org/export/sites/aade/</a> resources/pdf/research/Outcomes Technical\_Review\_2011.pdf.
- 11. Peeples M, Tomky D, Mulcahy K, et al. Evolution of the American Association of Diabetes Educators' diabetes education outcomes project. *Diabetes Educ.* 2007;33(5):794-817.
- 12. Haas L, Maryniuk M, Beck J, et al. National standards for diabetes self-management education and support. *Diabetes Care*. 2014;37 Suppl 1:S144-153.
- 13. Mulcahy K, Maryniuk M, Peeples M, et al. Diabetes self-management education core outcomes measures. *Diabetes Educ.* 2003;29(5):768-770, 773-784, 787-768 passim.
- 14. American Association of Diabetes Educators. Guidelines for the Practice of Diabetes Education Available:
- $\underline{http://www.diabeteseducator.org/export/sites/aade/\_resources/pdf/general/PracticeGuidelines2011.pdf.}$
- 15. Lu DF, Park HT, Ucharattana P, et al. Nursing outcomes classification in the systematized nomenclature of medicine clinical terms: a cross-mapping validation. *Comput Inform Nurs.* 2007;25(3):159-170.
- 16. Richesson RL, Nadkarni P. Data standards for clinical research data collection forms: current status and challenges. *J Am Med Inform Assoc.* 2011;18(3):341-346.
- 17. Smith K, Smith V. Successful interdisciplinary documentation through nursing interventions classification. *Semin Nurse Manag.* 2002;10(2):100-104.
- 18. Stone PW, Lee NJ, Giannini M, et al. Economic evaluations and usefulness of December 2014

standardized nursing terminologies. Int J Nurs Terminol Classif. 2004;15(4):101-113.

- 19. Hardiker NR, Hoy D, Casey A. Standards for nursing terminology. *J Am Med Inform Assoc.* 2000;7(6):523-528.
- 20. American Association of Diabetes Educators. CQI: A Step-by-Step Guide for Quality Improvement in Diabetes Education 2008