



Special Considerations in the Management and Education of Older Persons with Diabetes
AADE Practice Advisory
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Life expectancy at birth in the United States was 78.1 years in 2008 and older people will represent more than 20% of all Americans by 2036.¹ The U.S. Census Bureau projects that the number of older Americans will rise to 80.5 million by 2050.² The burden of diabetes is high among older Americans and is increasing. The Centers for Disease Control and Prevention (CDC) reported that, as of 2010, one in five non-institutionalized older Americans had been diagnosed with diabetes and they accounted for almost 40% of all diabetes cases.³ The challenges of diabetes self-management also increase with age. Normal age-related deterioration in mental and physical functioning tends to interfere with effective self-management of diabetes, especially after age 75.^{4,5} For simplicity, this practice advisory classifies those aged 65 or older as older adults.

Role of Diabetes Educators

Diabetes educators help older persons with diabetes set appropriate goals, learn self-management skills and acquire knowledge about their disease. Diabetes educators assess and address age-related changes as well as other factors that may interfere with good diabetes self-management.¹⁰ The diabetes education plan incorporates regular assessments to evaluate changes in the patient's functional, cognitive and psychosocial status over time. Diabetes educators enhance self-management skills that are appropriate to the patient's diabetes-related symptoms and concomitant conditions and therapies.⁹ ¹¹ Within this context, diabetes educators also educate caregivers, homecare, and clinical staff about the AADE7 Self Care Behaviors™ and their relevance to older persons with diabetes. The diabetes educators' role within the AADE7 Self Care Behaviors frameworks is as follows:

Healthy Eating

- Collaborate with the patient to set nutrition-related goals that avoid both hyper and hypoglycemia, while helping the patient maintain a reasonable weight.¹⁴⁻¹⁶
- Conduct initial and ongoing assessment to address weight status, age factors that could impact food consumption such as changes to the individual's sense of taste or smell, appetite,

swallowing ability, dentition, functional ability to obtain and prepare food, cooking facilities and equipment, finances, ability to self-feed, loss of appetite, social isolation, and nutrition knowledge.^{12,17}

Being Active

- Prior to designing any physical activity program, assess cardiovascular status, co-morbid conditions (e.g. emphysema, osteoarthritis, retinopathy), risks associated with aging (i.e., frailty) and the possibility of hypoglycemia.^{13, 20}
- Collaboratively set activity goals that accommodate the individual's interests, mental and physical abilities.²¹

Monitoring

- Assess the person's ability and need for blood glucose monitoring.^{22, 23} Successful meter operation requires adequate vision, manual dexterity, and cognitive ability.
- Recommend a glucose meter that will meet the person's physical and mental abilities, establish a blood glucose monitoring schedule based on the person's individual needs, financial status, and also provide instruction for caregivers when needed.
- Costs associated with blood glucose monitoring may have an impact on monitoring ability and so when appropriate, financial status should be taken into account to help insure that recommendations made are realistic.

Taking Medication

- Assess medication adherence, beliefs about medications, and factors associated with non-adherence.
- When medication non-adherence is found, devise an education plan, advocate for simplified regimens, assess medication-related adverse effects, recommend screening for depression, determine financial barriers, and refer to other healthcare providers as appropriate.¹³

Problem Solving

- Enhance the effectiveness of diabetes education by taking care not to exceed the individual's current cognitive ability for learning.
- Minimize the cognitive demands of instruction by focusing on the individual's most critical problems in self-management, sequencing instruction logically in small steps, and providing opportunities for guided practice, feedback, and demonstrable success.

- If there are signs of age-related cognitive decline, especially dementia, educate family or other caregivers about effective diabetes self-management.

Reducing Risks

- Help patients and their caregivers to set goals that reduce the risks for acute and chronic complications.^{34, 35}
- Work with the patient's diabetes care team to set appropriate A1C and blood glucose goals to avoid hypo- and hyperglycemia, to reduce the risk of hyperglycemic-hyperosmolar non-ketotic syndrome, falls and injuries, and negative effects on cognition.³⁶
- Educate about the importance of daily foot care, yearly screening tests such as eye examinations for retinopathy and urine testing for microalbumin, and preventive care such as immunizations and smoking cessation to reduce the risk or progression of chronic complications.

Healthy Coping

- Assess for stress which may be magnified by increased social isolation and reduced psychosocial support as they lose spouses, peers, and physical mobility or have to move away from familiar surroundings.³⁸
- Screen for depression and refer for treatment if needed.

The initial diabetes education assessment for the older adult includes the individual's cognitive and functional levels, ability to perform activities of daily living, educational preferences and residence. Older persons with diabetes in acute care settings should be referred for diabetes self-management education (DSME) as early as possible. Survival skills should be assessed with review and teaching as needed. Short-term self-care learning needs are identified and appropriate DSME provided.³³ Referral for outpatient DSME should be made based on urgency of need.

Those persons residing in long term care or rehabilitation facilities have additional needs.³⁷ DSME in the long term care setting should be tailored to the person's condition and limited during times of confusion. While limited in some institutionalized individuals, DSME should focus on preventing further deterioration from preventable causes, such as falls resulting from hypoglycemia or exacerbation of existing coronary artery disease. The timing of meals, medications, and food choices at long term care facilities may affect the older resident's ability to self-manage their diabetes, necessitating education for the resident, family members, and staff.

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