

# Diabetes Self-management Education: What, Why, How

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# What is DSME?



# What is Diabetes Education (DSME)?

The on-going process of facilitating the knowledge, skills and ability necessary for diabetes self-management. The process incorporates the needs, goals and life experiences of the person with diabetes and is guided by evidence-based standards.

(ADA 2015)

# What is Diabetes Education?

The overall objectives are to support:

- Informed decision-making
- Self-management
- Problem-solving
- Active collaboration with the health care team
- Improved clinical outcomes, health status and quality of life

(ADA 2015)

(ADA 2015)

# Why is Diabetes Education Essential?



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# Why is Diabetes Education Essential?

The realities of diabetes:

- 99% of diabetes management is self-management
- Self-management is primarily affected by psychosocial issues and diabetes-related distress
- Self-management and patient decision-making greatly impact outcomes

# Why is Diabetes Education Essential?

- “Most people with diabetes are not actively engaged by their healthcare professionals to take control of their condition; education and psychosocial care are often unavailable.”
  - Diabetes-related distress reported by 44.6%, but only 23.7% reported that their healthcare team asked them how diabetes impacted their life
  - 48.8% had received formal education; 81.1% found it helpful

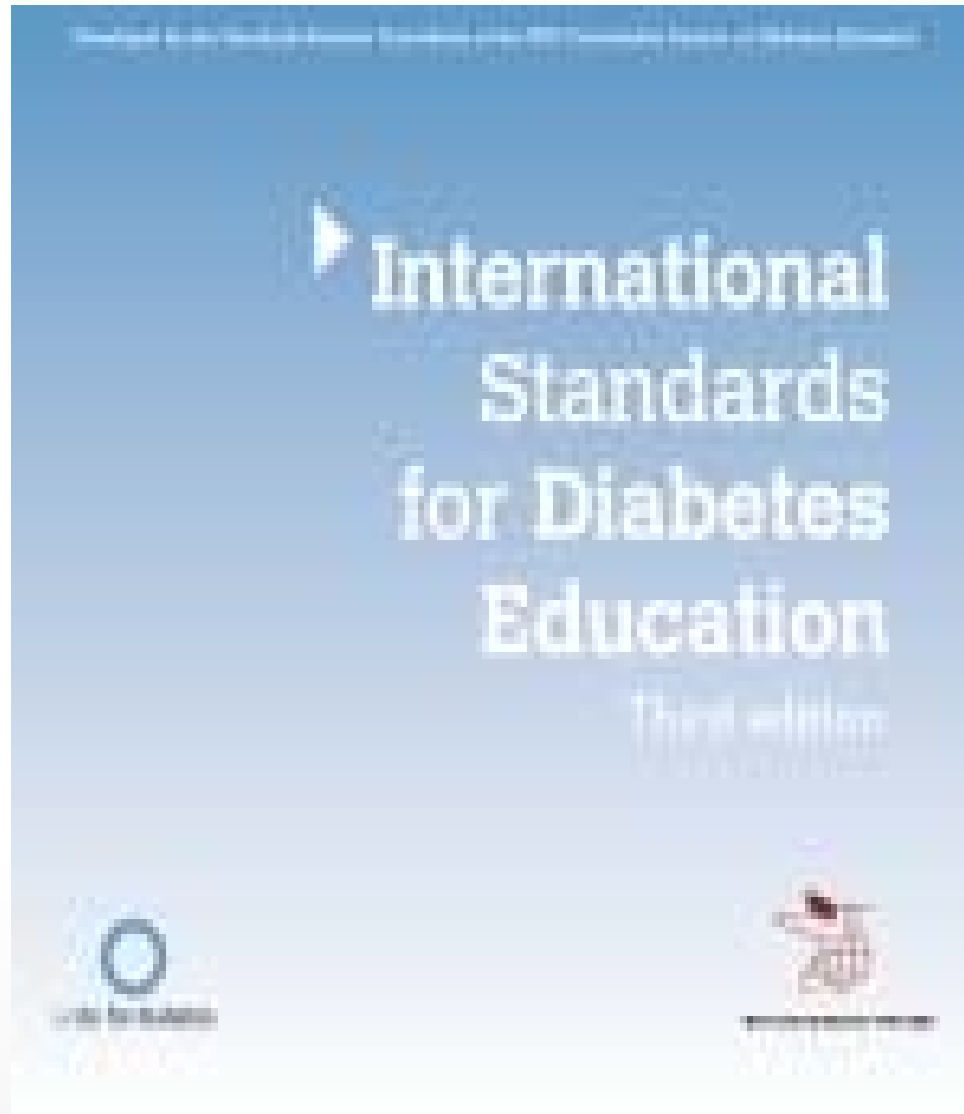
# Why is Diabetes Education Essential?

- Diabetes self-management education is effective for improving clinical and quality of life outcomes, at least in the short-term.
- Diabetes self-management education is cost-effective.
- More is better (>10 hours)

(Brown 1999; Norris 2001, 2002; Duncan 2010, 2011)



# How to Provide Diabetes Education



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# How to Provide Diabetes Education

- Traditional knowledge-based diabetes DSME is essential but not sufficient for sustained behavior change.



# How to Provide Diabetes Education

- There is no single best educational program or approach
- Group self-management education is at least as effective as individual education
- Programs that incorporate behavioral and psychosocial strategies, are age, culturally and literacy appropriate and empowerment-based improve outcomes

(Rotter Norris; Rubin; Glasgow; Polonsky; Funnell; Sarkisian 2003; Chodash 2005; Hawthorne 2008; Norris 2002; Deakin 2005; Duke 2009)

# How to Provide Diabetes Education

- On-going diabetes self-management support (DSMS) is critical in order to sustain participants' progress resulting from diabetes self-management education
- The support can include behavioral, educational, psychosocial and/or clinical

# Modern Teaching Strategies

- Initially focused on knowledge and “compliance /adherence” as the major outcome
- More recently focused on behavior change and strategies to facilitate behavior change
- Most recently have recognized need to address knowledge, behavior and psychosocial aspects, along with providing on-going support

# Modern Teaching Strategies: Patient Centered

- Based on adult learning so NO lectures
- Respond to questions based on patient concerns
- Integrate clinical, behavioral and psychosocial
- Patient experiences serve as the curriculum
- Effective
- Examples include empowerment-based, Expert Patient, Conversation Maps, Desmond, DIAMOS, etc.

# Modern Teaching Strategies: Technology

- Data are mixed in terms of DSME outcomes
- Useful for DSMS, prevention, reinforcement, tracking behaviors, communication
- Use will increase



# Health Literacy

Among diabetes patients, those with low literacy:

- Have greater difficulty understanding their condition
- Are less confident managing their diabetes
- Are less likely to engage in self-management
- Have worse glycemic control
- Have poorer communication with providers



# Health Literacy

## **health literacy**

*noun* / 'helth 'li-t(ə-)rə-sē

: capacity to obtain, process,  
and understand basic health  
information and services to make  
appropriate health decisions

# Health Literacy

Or, in plain language,  
health literacy is:

A person being able to  
understand and take  
the right action to  
make good health  
choices.

# Health Literacy

- Use plain language in written and spoken materials (no jargon)
  - Less than 2 syllables
- Explain medical terms
- Avoid phrases with two interpretations (eg, positive test results; negative test results)
- Open-ended questions ('What questions do you have?' not 'Do you have questions?')
- Highlight key recommendations
- Universal Precautions

# Building Cultural Awareness

- “Do you have any cultural/religious practices that influence how you care for your diabetes?”
- Ask about traditional and natural remedies
- Assess the role of family members and friends in making healthcare decisions
- Offer to include family members in discussions



# Quality Diabetes Education



# Quality Diabetes Education

- Evidence-based Standards have been developed by the International Diabetes Federation
- Many European countries as well as others (e.g., U.S., Canada) have also developed evidence-based Standards
- Standards are designed to ensure quality; not to define or dictate a specific program

# Content Areas to Address

- Role, rights and responsibilities
- Integrating psychosocial adjustment into daily life
- Disease process and treatment options
- Incorporating nutritional management into lifestyle
- Managing medications safely
- Monitoring and using the information for decision-making
- Preventing, detecting, treating acute complications
- Preventing, detecting, treating chronic complications
- Setting goals and creating action plans
- How and where to obtain supplies
- The importance of on-going DSME and DSMS Community resources
- How to work effectively with health care team

# Evaluation

- Effectiveness and quality need to be assessed annually and linked to outcomes and revised on the basis of the assessment
- Need to evaluate individual learning, participant outcomes and programmatic outcomes



# DSME/S Algorithm

## Diabetes Self-management Education and Support for Adults With Type 2 Diabetes: Algorithm of Care

ADA Standards of Medical Care in Diabetes recommends all patients be assessed and referred for:



### Four critical times to assess, provide, and adjust diabetes self-management education and support

| 1<br><i>At diagnosis</i>   | 2<br><i>Annual</i> assessment of education, nutrition, and emotional needs  | 3<br>When new <i>complicating factors</i> influence self-management   | 4<br>When <i>transitions</i> in care occur   |
|--|---|---|--|
| <b>When primary care provider or specialist should consider referral:</b>  |   |   |  |
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Newly diagnosed. All newly diagnosed individuals with type 2 diabetes should receive DSME/S</li> <li><input type="checkbox"/> Ensure that both nutrition and emotional health are appropriately addressed in education or make separate referrals</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Needs review of knowledge, skills, and behaviors</li> <li><input type="checkbox"/> Long-standing diabetes with limited prior education</li> <li><input type="checkbox"/> Change in medication, activity, or nutritional intake</li> <li><input type="checkbox"/> HbA<sub>1c</sub> out of target</li> <li><input type="checkbox"/> Maintain positive health outcomes</li> <li><input type="checkbox"/> Unexplained hypoglycemia or hyperglycemia</li> <li><input type="checkbox"/> Planning pregnancy or pregnant</li> <li><input type="checkbox"/> For support to attain and sustain behavior change(s)</li> <li><input type="checkbox"/> Weight or other nutrition concerns</li> <li><input type="checkbox"/> New life situations and competing demands</li> </ul> | Change in: <ul style="list-style-type: none"> <li><input type="checkbox"/> Health conditions such as renal disease and stroke, need for steroid or complicated medication regimen</li> <li><input type="checkbox"/> Physical limitations such as visual impairment, dexterity issues, movement restrictions</li> <li><input type="checkbox"/> Emotional factors such as anxiety and clinical depression</li> <li><input type="checkbox"/> Basic living needs such as access to food, financial limitations</li> </ul> | Change in: <ul style="list-style-type: none"> <li><input type="checkbox"/> Living situation such as inpatient or outpatient rehabilitation or now living alone</li> <li><input type="checkbox"/> Medical care team</li> <li><input type="checkbox"/> Insurance coverage that results in treatment change</li> <li><input type="checkbox"/> Age-related changes affecting cognition, self-care, etc.</li> </ul> |

# DSME/S Algorithm Action Steps

| Diabetes Self-management Education and Support Algorithm: Action Steps   |  |   |   |
|--|--|---|---|
| Four critical times to assess, provide, and adjust diabetes self-management education and support  |  |   |   |
| At diagnosis   | Annual assessment of education, nutrition, and emotional needs   | When new <i>complicating factors</i> influence self-management  | When <i>transitions</i> in care occur   |
| Primary care provider/endocrinologist/clinical care team: areas of focus and action steps  |  |   |   |
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Answer questions and provide emotional support regarding diagnosis</li> <li><input type="checkbox"/> Provide overview of treatment and treatment goals</li> <li><input type="checkbox"/> Teach survival skills to address immediate requirements (safe use of medication, hypoglycemia treatment if needed, introduction of eating guidelines)</li> <li><input type="checkbox"/> Identify and discuss resources for education and ongoing support</li> <li><input type="checkbox"/> Make referral for DSME/S and MNT</li> </ul>  | <ul style="list-style-type: none"> <li><input type="checkbox"/> Assess all areas of self-management</li> <li><input type="checkbox"/> Review problem-solving skills</li> <li><input type="checkbox"/> Identify strengths and challenges of living with diabetes</li> </ul>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> Identify presence of factors that affect diabetes self-management and attain treatment and behavioral goals</li> <li><input type="checkbox"/> Discuss effect of complications and successes with treatment and self-management</li> </ul>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> Develop diabetes transition plan</li> <li><input type="checkbox"/> Communicate transition plan to new health care team members</li> <li><input type="checkbox"/> Establish DSME/S regular follow-up care</li> </ul>   |
| Diabetes education: areas of focus and action steps  |  |   |   |
| <p>Assess cultural influences, health beliefs, current knowledge, physical limitations, family support, financial status, medical history, literacy, numeracy to determine content to provide and how:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Medications—choices, action, titration, side effects</li> <li><input type="checkbox"/> Monitoring blood glucose—when to test, interpreting and using glucose pattern management for feedback</li> <li><input type="checkbox"/> Physical activity—safety, short-term vs. long-term goals/recommendations</li> <li><input type="checkbox"/> Preventing, detecting, and treating acute and chronic complications</li> <li><input type="checkbox"/> Nutrition—food plan, planning meals, purchasing food, preparing meals, portioning food</li> <li><input type="checkbox"/> Risk reduction—smoking cessation, foot care</li> <li><input type="checkbox"/> Developing personal strategies to address psychosocial issues and concerns</li> <li><input type="checkbox"/> Developing personal strategies to promote health and behavior change</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Review and reinforce treatment goals and self-management needs</li> <li><input type="checkbox"/> Emphasize preventing complications and promoting quality of life</li> <li><input type="checkbox"/> Discuss how to adapt diabetes treatment and self-management to new life situations and competing demands</li> <li><input type="checkbox"/> Support efforts to sustain initial behavior changes and cope with the ongoing burden of diabetes</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide support for the provision of self-care skills in an effort to delay progression of the disease and prevent new complications</li> <li><input type="checkbox"/> Provide/refer for emotional support for diabetes-related distress and depression</li> <li><input type="checkbox"/> Develop and support personal strategies for behavior change and healthy coping</li> <li><input type="checkbox"/> Develop personal strategies to accommodate sensory or physical limitation(s), adapting to new self-management demands, and promote health and behavior change</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Identify needed adaptations in diabetes self-management</li> <li><input type="checkbox"/> Provide support for independent self-management skills and self-efficacy</li> <li><input type="checkbox"/> Identify level of significant other involvement and facilitate education and support</li> <li><input type="checkbox"/> Assist with facing challenges affecting usual level of activity, ability to function, health beliefs, and feelings of well-being</li> <li><input type="checkbox"/> Maximize quality of life and emotional support for the patient (and family members)</li> <li><input type="checkbox"/> Provide education for others now involved in care</li> <li><input type="checkbox"/> Establish communication and follow-up plans with the provider, family, and others</li> </ul> |

# In Summary

- We need to actively engage our patients in self-management education and support
- Diabetes self-management education and support are effective
- Use of effective teaching methods that are designed to be literacy, culturally and age appropriate improves outcomes
- Patients aren't interested in diabetes, but they are highly interested in their **own** diabetes

