

INDIAN HEALTH DIABETES BEST PRACTICE

Diabetes Self-Management Education (DSME) and Support

Revised April 2011

Note! Please review the Best Practice Addendum, which provides the most current information on the Required Key Measures along with examples of ways to obtain the measures. The Best Practice Addendum can be found here: http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Tools/BestPractices/BP_2011_Table_RKM_508c.pdf

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Instructions for Using This Best Practice

The Best Practices are organized into topics on how to plan for and successfully implement a Best Practice in your community.

- **Part 1** provides background information on planning for your program and evaluation, Key Recommendations, and Key Measures.
- **Part 2** provides details on implementation of the Key Recommendations.
- **Part 3** includes appendices, tools, and resources.
- **Part 4** provides a list of references.

As you prepare to select, implement, and evaluate a Best Practice, consider these planning guidelines:

- Meet with your diabetes team to discuss which Best Practice(s) is best suited for your situation and resources.
- Use data from your *Diabetes Care and Outcomes Audit* and/or from a community needs assessment to guide your selection of the Best Practice(s).
- Determine your program goal(s) as a team. For example, your team may decide to work toward increasing the number of people who receive eye exams.
- Print out at least Part 1 of the Best Practice(s) your team feels is most appropriate to implement.
- Work with your diabetes team to review and discuss the Best Practice(s). You may choose to read it together as a team.
- Choose at least one Best Practice after carefully considering your goals and resources (funding, staff, and time).
- **Review the entire Best Practice(s) you have selected with your diabetes team:**
 - Confirm that you have selected a Best Practice(s) appropriate for your community needs and resources and that you are confident that your team can successfully implement, evaluate (measure), and document progress and outcomes.
 - Target the population your team wants to improve outcomes for with the Best Practice(s). Remember, you probably do not have resources to do everything for everyone.
 - Carefully consider the Key Recommendations. The recommendations are based on evidence and have been proven to be effective. You may already be doing some of the recommendations and can easily fit these into your plan, or you may want to consider some new recommendations to enhance and strengthen your program. Identify those your team can implement.
 - Carefully review the Key Measures. Choose those that best fit with your goals and the Key Recommendations you have chosen to implement.
 - If one Best Practice does not fit, then review another Best Practice until you find one that fits.

Throughout the document you will find links that draw your attention to important items within the Best Practice pdf. Here is a list of the items:

- **Action!** Indicates a **link**. Please use the link to access more detailed descriptions.
- **Note!** Indicates an **important** item. Pay special attention to this **important** item.

Summary of Key Recommendations and Key Measures

Key Recommendations for Diabetes Self-Management Education and Support. These are evidence-based actions that will lead to improved outcomes in the community. Action! See [Part 2](#) for details on the implementation of each key recommendation.

1. Provide diabetes self-management education (DSME) that:
 - Incorporates a multidisciplinary team approach
 - Establishes a client-centered approach
 - Uses the DSME collaborative process
2. Evaluate DSME services on an ongoing basis for effectiveness and achievement of objectives.
3. Provide ongoing self-management support (SMS).
4. Partner with community programs for DSME and SMS.
5. Provide a client-centered organization environment.

Key Measures for Diabetes Self-Management Education and Support. These are specific measures that can be used to document changes in outcomes related to implementing the Best Practice.

Note! All SDPI grant programs that choose this Best Practice must report **as required in the terms and conditions attached to the notice of award on **indicated** * Measures. Programs may report on other measures as well.**

Educational

1. *Percent of individuals with documented diabetes self-management education (DSME) in the past twelve months.

Behavioral

2. *Percent of individuals with documented diabetes self-management education (DSME) who achieved one or more patient identified behavioral goals in the past twelve months.
3. Percent of individuals with documented diabetes self-management education (DSME) with improvement in their confidence scores in the past twelve months for one or more self-management behaviors.

Clinical

4. *Percent of individuals with documented diabetes self-management education (DSME) who achieved one or more patient identified clinical goals in the past twelve months.

Self-Management Support

5. *Percent of individuals with documented diabetes self-management education (DSME) who were referred to clinical or community resources for self-management support (SMS) in the past twelve months.

PART 1 Essential Elements of Implementing this Best Practice

Purpose

This document provides guidance for organizations and communities that seek to deliver effective diabetes self-management education (DSME) services and provide self-management support (SMS).

Type 2 diabetes continues to be one of the most serious health problems in American Indian and Alaska Native (AI/AN) communities. The prevalence of diabetes among AI/AN people is 16.3%, compared with 8.7% of non-Hispanic whites (Division of Diabetes Fact Sheet 2008). An estimated 30% of AI/AN adults are also diagnosed with pre-diabetes.

Diabetes is a chronic disease that extends over the lifetime of the individual. One of the biggest challenges facing people with diabetes is making behavior changes and learning skills for the day to day management of their condition. Diabetes self-management education is an integral component of diabetes care to help individuals take control of their health and retain the highest quality of life. Persons with diabetes or at risk for diabetes also benefit from ongoing self-management support to address the clinical, behavioral, and emotional changes that occur throughout the life of the individual.

Target Population

This best practice describes key elements that are needed to provide quality DSME services for any person with diabetes (type 1, type 2, gestational diabetes) or at risk for diabetes.

Action! See [Part 3 – Appendix A](#). Supplemental Information for discussion of the Importance of a Diabetes Self-Management Education and Support Program.

Intended Users of this Best Practice

- Diabetes program coordinators
- Diabetes care team members
- Primary health care providers
- Community health workers
- Leaders of community programs
- Leaders of health care organizations

Action! See [Part 3 – Appendix A](#). Supplemental Information for discussion of the benefits and risks of implementing this Best Practice.

Definition of Diabetes Self-Management Education and Support

Self-management refers to those things a person and/or family member/caregiver do to manage a chronic condition, and live a full and productive life. Individuals with a chronic disease face new tasks in three areas: 1) managing symptoms and the medical treatment plan (medical management); 2) performing activities as a spouse, parent, worker, etc. (role management); and 3) coping with emotions (emotional management). In order to meet these tasks, an individual must engage in a variety of self-management behaviors and activities. The American Association of Diabetes Educators (AADE) has identified seven domains of behavior for effective diabetes self-management: healthy eating, being active, monitoring blood glucose, taking medications, risk reduction, healthy coping, and problem solving.

Action! See [AADE7\(TM\) resources at](http://www.diabeteseducator.org/ProfessionalResources/AADE7/)
<http://www.diabeteseducator.org/ProfessionalResources/AADE7/>

Diabetes self-management education is the provision of supportive interventions, including education and skills training, to increase the confidence an individual needs for the day to day management of their diabetes care. This involves the person with diabetes or at risk for diabetes, family member/caregiver, and the diabetes care team. Typically, a diabetes educator provides DSME through a formal program. However, all members of the health care team can provide DSME in various settings and situations. Some elements of DSME may also be delivered in community settings by community health workers, peer counselors, or other community-based workers such as fitness centers and food assistance programs.

Goals of This Best Practice

- To increase the confidence of the person with, or at risk for, diabetes, and/or family member/caregiver, to adopt positive diabetes self-management behavior and take an active role in their diabetes care. Effective DSME recognizes the central role of the individual in their care and supports informed decision making.
- To promote a collaborative approach where individuals with, or at risk for, diabetes, and all members of the health care team, work together to establish goals, create an action plan for self-management behavior change, and evaluate outcomes. It is a client-centered approach where the educational content is based on individualized needs, health goals, and life experiences of the person with diabetes or at risk for diabetes.
- To encourage the person with, or at risk for, diabetes and/or family member/caregiver, to assume a leadership role, in partnership with the diabetes care team, in achieving positive health outcomes to delay or prevent complications.

Key Recommendations

These are evidence-based actions that can lead to improved outcomes for persons with diabetes or at risk for diabetes.

Key Recommendations for Diabetes Self-Management Education and Support Best Practice. These are evidence-based actions that will lead to improved outcomes in the community.

1. Provide diabetes self-management education (DSME) that:
 - Incorporates a multidisciplinary team approach
 - Establishes client-centered approach
 - Uses the DSME collaborative process
2. Evaluate DSME services on an ongoing basis for effectiveness and achievement of objectives.
3. Provide ongoing self-management support (SMS).
4. Partner with community programs for DSME and SMS.
5. Provide a client-centered organization environment.

Action! See [Part 2](#) for details on the implementation of each Key Recommendation.

PLANNING FOR YOUR PROGRAM AND EVALUATION

Key Action Steps include:

1. **Identify your program's goal(s).** There are many program goals consistent with the Key Recommendations of this practice. Choose program goals that fit with the Key Recommendations and your resources. Examples of Program Goals include:
 - Increase the number of people with diabetes who receive DSME.
2. Increase the number of people with diabetes who have received DSME who achieve their clinical and behavioral goals 2. **Define program objectives** that will be met to reach the program goal(s) in the **SMART format** (specific, measurable, **action-oriented**, **realistic**, and time-bound).

Examples of SMART objectives for **this Best Practice**:

- To increase the number of adults with diabetes who received DSME from 50% to 60% in the next twelve months.
 - To increase the percent of adults with diabetes with documented DSME who achieve one or more self-identified behavioral goals from 60% to 75% in the next twelve months.
 - To increase the percent of adults with diabetes with documented DSME who achieve one or more self-identified clinical goals from 55% to 70% in the next twelve months.
3. **Use Key Measures.** The following Key Measures can be used to monitor progress and the effectiveness of implementing this Best Practice. Results of measures will indicate the degree of success in implementing the **Key Recommendations** and meeting program goals.

Measures of progress need to occur before the intervention (baseline) and at designated times thereafter. Measurement needs to be frequent enough to provide meaningful information for planning and evaluation.

Key Measures

Key Measures for Diabetes Self-Management Education and Support. These are specific measures that can be used to document changes in outcomes related to implementing the Best Practice.

Note! All SDPI grant programs that choose this Best Practice must report **as required in the terms and conditions attached to the notice of award on indicated *** Measures. Programs may report on other measures as well.

Educational

1. *Percent of individuals with documented diabetes self-management education (DSME) in the past twelve months.

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Clinical

4. *Percent of individuals with documented diabetes self-management education (DSME) who achieved one or more patient identified clinical goals in the past twelve months.

Self-Management Support

5. *Percent of individuals with documented diabetes self-management education (DSME) who were referred to clinical or community resources for self-management support (SMS) in the past twelve months.

4. Collect, record, and analyze data on an ongoing basis; share with the team and the organization leadership.

5. Use creative ways to display data and measure outcomes, such as graphs or charts. This helps the team understand the data and know whether there are improvements.

6. Think about what the data are telling you. What changes are you seeing? Are they improvements? Use data for planning next steps.

Action! Link to the following resources to help your program improve.

See **Part 3 – Appendix B. Key Measures Example** to assist you with identifying ways to choose Key Measures that incorporate your community data.

See **Part 3 – Appendix C. Improving Diabetes Self-Management Education and Support Programs Example** to assist you with applying Key Recommendations and Key Measures to a program plan.

Action! You can also link to an online training and a workbook to get more ideas about setting goals and objectives, and developing a program plan. Available from: (see pages 23-28.)
<http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/Creating/Workbook.pdf>

Team Notes:

PART 2 Key Recommendations

Note! Part 2 provides **important** detail on the “why?” and “how?” of implementation of each Key Recommendation.

Key Recommendation 1. Provide diabetes self-management education (DSME):

- Incorporate a multidisciplinary team approach.
- Establish a client-centered approach.
- Use the DSME collaborative process.

Why?

Diabetes self-management education (DSME) is the ongoing provision of supportive interventions, including education and skills training, which increase the confidence an individual with diabetes or at risk for diabetes needs to make decisions about their diabetes self-management and risk factor management, and improve their quality of life. The DSME process guides the diabetes care team to collaboratively set goals, develop an individualized action plan, and foster active participation in health care decisions. This incorporates an assessment of psychosocial and lifestyle issues which may challenge individuals in adopting self-management behavior. Periodic follow-up is needed to reassess self-management behavior, identify barriers, assist with problem solving and redefine goals as changes may occur due to age, lifestyle, progression of the disease process and/or detection of risk factors for complications.

DSME services may be provided through a formal education program or through brief encounters which are focused on the individualized needs of the individual and/or family member/caregiver. A targeted assessment directs the development of an action plan and the education content required to meet the self-management behavioral goal. Generally, DSME content is focused on one or more of the seven domains for diabetes self-management; healthy eating, being active, blood glucose monitoring, taking medications, risk reduction, healthy coping, and problem solving. Individuals and/or family members/caregivers may not require information from all of the domains.

Action! See [AADE7\(TM\) resources](http://www.diabeteseducator.org/ProfessionalResources/AADE7/) at <http://www.diabeteseducator.org/ProfessionalResources/AADE7/>

How to Implement the Key Recommendation

A. Incorporate a multidisciplinary team approach.

DSME is most effective when delivered by a multidisciplinary team which includes, at a minimum, a registered nurse and a registered dietitian. Teams may involve health care professionals such as a physician, nurse practitioner, physician assistant, pharmacist, social worker, health educator, community health worker, lifestyle coach, and/or personal trainer for a multidisciplinary team approach. DSME teams consist of health care professionals that have experience or training in clinical, educational, and behavioral aspects of diabetes care.

Important characteristics of effective DSME teams include:

- clearly defined team member roles
- two-way communication between the diabetes educator, the primary care provider, and other members of the health care team; and

- a comprehensive plan of care.

Although a multidisciplinary team is ideal, one individual tasked with providing DSME services can be effective. A process to provide ongoing self-management support (SMS) from other members of the health team and community programs is recommended.

B. Establish a client-centered approach

Effective DSME recognizes the central role that individuals have in their diabetes care and supports informed decision-making. The establishment of a client-centered approach is crucial to providing effective DSME services. The diabetes educator's style and attitude during an encounter are characterized by active listening techniques, trust, respect, openness, and genuine interest in the well-being of the individual. Individuals are more likely to change when their relationship with the diabetes educator is based on these characteristics. This fosters individual understanding of their condition, exploration of possible options for care/treatment and active participation in their care. In addition, diabetes educators can create an environment in which individuals feel comfortable with talking about their needs, problems, and feelings.

In the client-centered approach, the individual sets the agenda for the educational encounter and collaborates with the diabetes educator in the development of goals and action planning. Family members and/or caregivers are included (as appropriate) to facilitate a client-centered approach.

C. Use the DSME collaborative process

1. Targeted Assessment

Targeted assessments obtain the information that is important to solving the problems identified by the client. The assessment helps to develop realistic goals, create an action plan, address the specific educational needs, and select appropriate interventions. The purpose of the assessment is to explore the current pressing problems and contributing factors the individual feels are important to their self-management.

The following factors are recommended in a targeted DSME assessment:

- Health, medical history, clinical and risk status
- Attitudes, beliefs, experiences, and desire to participate
- Psychosocial status
 - Family and social support
 - Economic resources
 - Emotional status and coping methods
- Literacy, readiness to learn, and learning style
- Cultural and religious practices
- Experiences with various aspects of self-management practices
 - Nutrition history and practices
 - Physical activity and exercise behaviors
 - Prescription and over the counter medications; complementary and alternative therapies
 - Home blood glucose monitoring

- Other diabetes self-management behaviors, including experience with self-adjusting the treatment plan
- Access to and use of health care resources

Only those factors that apply to the individual's current problem need to be addressed on the initial assessment. Information on remaining factors can be obtained at a later time or when the need arises.

Note! It is important to note that the assessment is an ongoing process and information is updated with each encounter.

A variety of assessment tools and interviewing methods are used to obtain the information needed for problem identification and problem solving. Some methods include (but are not limited to):

- Assessment forms and questionnaires
- Health risk appraisals
- Self-monitoring logs/records
- Active Listening skills
- Motivational Interviewing
- “Ask-Tell-Ask” technique
- “Closing the Loop” technique
- Behavior Change Protocol

Action! See Part 3 – Tools and Resources for references for these assessment tools. See AADE, The Art and Science of Diabetes Self-Management Education, 2nd Edition at <http://www.diabeteseducator.org/> for examples of assessment tools and interviewing methods.

2. Individualized action plan

Action plans are an agreement between the person with diabetes or at risk for diabetes, family member/caregiver, and the diabetes educator about making a behavior change for diabetes self-management. Development of the action plan is a collaborative process and the result of a discussion with the individual and/or family member/caregiver about their goals. An action plan reflects a step on the way to help them achieve their goal. Collaborative action planning yields greater success than being told what to do.

A problem solving approach is useful in understanding those factors which may prevent individuals from completing their action plans. This includes discussion of the following:

- Identification of barriers for completing the action plan
- What has worked in the past to overcome this or similar barriers
- Self-generated ideas for overcoming the barriers, and
- Clinician-generated ideas for overcoming barriers (with client permission).

Action plans are specific activities that a person with diabetes or at risk for diabetes will do to reach their self-management goal. Using the SMART framework can help develop an effective action plan to increase the individual's confidence in reaching their diabetes self-management goal. The SMART framework details the proposed activity such as; who, what, when, where, and how. For example, a SMART goal is to walk 15 minutes around the block on Monday, Wednesday, and Friday during my lunch break for two weeks.

Elements of the SMART framework include:

- **Specific behavior-change goal** - a specific goal has a much greater chance of being accomplished than a general goal.
- **Measurable** – allows the individual to see progress toward the goal
- **Attainable** – individual has access to resources to reach the goal (i.e., knowledge, skills, and time)
- **Realistic** – there is a high probability of success with goal attainment
- **Timed** – a time frame in which the patient can achieve the goal

An action plan includes the educational needs, selection of appropriate content, teaching methods, and interventions to address the individual's plan to reach their goal. The goal and action plan are documented in the individual's medical record and communicated with other members of the health care team.

3. Measure client confidence

Measuring the individual's confidence is a way to determine if the action plan is realistic. Each action plan is checked for how confident or how sure the individual is that they can achieve the goal they set for themselves. This can be measured on a scale of 0 – 10, with 0 being "no confidence" and 10 being "very confident", that they can complete their action plan. A score of 7 or greater indicates the individual will likely succeed with completing their plan. If the score is less than 7, the next step is to use problem solving to come up with an alternate action plan which will yield a higher confidence level.

4. Delivery of appropriate content

The assessed needs, and skills to reach the individual's self-management goal will determine the content to be delivered. This requires the identification of appropriate educational methods, materials, and resources to support the learning style of the individual. Effective educational methods incorporate participatory learning that encourages discussion and promotes problem solving.

Other factors to consider when implementing diabetes self-management education include:

- sensitivity to readiness to learn, cultural factors, literacy levels, and special needs
- use of curriculum and other educational materials which are age appropriate
- available educational materials and resources (such as internet and media)
- provision of sequential education which progresses from basic survival skills to advanced information
- provision of a forum which fosters support, encouragement, and empowerment; and
- appropriate setting for the delivery of diabetes self-management education.

A written curriculum or collection of lesson plans will serve as the framework for the delivery of the diabetes self-management education content. A comprehensive curriculum includes measurable, written learning objectives, content outline, instructional methods, teaching materials, and evaluation methods. Curriculum content reflects current practice guidelines and is age and culturally-appropriate for the target population. In addition, all members of the health care team are knowledgeable of the curriculum or teaching plans being used to assure consistency of information among team members.

Recommended diabetes self-management education content includes:

- describing the diabetes disease process, along with prevention and treatment options
- incorporating nutritional management into the person's lifestyle
- incorporating physical activity into the person's lifestyle
- using medication(s) safely and for maximum therapeutic effectiveness
- monitoring blood glucose and other parameters; interpreting and using the results for self-management decision-making
- preventing, detecting, and treating acute complications
- preventing, detecting, and treating chronic complications
- developing strategies to address psychosocial issues and concerns, and
- developing personal strategies to promote health and behavior changes.

Supplemental educational materials may be needed to address the individualized needs of the individual.

Action! See [Part 3 – Tools and Resources](#) for a list of recommended curricula and other resources for educational materials.

5. Follow-up and feedback

A plan for follow-up to obtain feedback relative to the individual's experience with implementing the action plan will help to build confidence with making behavior change. Each action plan is dynamic and may require revisions to address inevitable factors encountered during implementation. Follow-up provides an opportunity for the individual and/or family member/caregiver to identify problems they encountered and lessons they learned while carrying out their plan and to explore alternative ways to achieve their goals (as appropriate). The time frame for a scheduled follow-up is established with the individual. Multiple follow-up visits may be needed when the client is challenged with completing the action plan.

DSME follow-up also includes discussion as to when the individual and/or family member/caregiver plan to make an appointment with their primary health care provider. A referral for ongoing self-management support to community resources or other health care resources (i.e., wellness center, CHR referral, foot care, and/or lipid clinic) are made.

Documentation is critical to evaluating the effectiveness of the action plan and the attainment of individual's self-management goal. Documentation of the action plan communicates the progress toward attainment of the self-management goal(s) to other members of the diabetes care team so they too can reinforce and support the efforts of the person with diabetes or at risk for diabetes:

- Evaluate progress toward goal attainment.
- Check adequacy of existing goals and action plans.

Action! See National Standards for Diabetes Self-Management Education at http://care.diabetesjournals.org/content/31/Supplement_1/S97.extract for additional guidance on providing quality self-management education.

Team Notes:

Key Recommendation 2. Evaluate diabetes self-management education (DSME) services.

Why?

Establishing program objectives and outcomes are a way for the diabetes educator to evaluate DSME services. Examining the effectiveness of DSME services benefits the diabetes educator and the health care team with defining their roles and responsibilities for providing effective DSME and self-management support (SMS). Outcomes can serve to improve communication among team members and establish a plan for making needed changes with providing services. Setting measureable targets for educational, behavioral, clinical, and SMS outcomes is an important function for evaluating the effectiveness of services provided to the target population.

An evaluation of DSME services is essential to determine what works and what does not work. DSME services can be evaluated based on measurable objectives and/or benchmarks for the provision of effective DSME services for the target population. Periodic review of the program goals, objectives, and outcome measures for effective DSME services are recommended as these may change over time. Evaluation also provides information that can be used to share successes and market DSME services to people with diabetes/at risk for diabetes, health care providers, Tribal leaders, administrators, community members, and other stakeholders.

How to Implement the Key Recommendation

A. Establish objectives and/or benchmarks.

Objectives outline in measurable terms the specific changes that will occur in the target population at a given point in time as a result of exposure to the services provided.

Elements of an objective include:

- What will change: outcome to be achieved
- When will change occur: condition under which the outcome will be observed
- How much change: criterion to determine whether the outcome has been achieved, and
- Who will change: target population.

A benchmark is a point of reference for a measurement to evaluate performance using a specific indicator. This involves identifying current best practices where similar objectives exist and comparing results, and targeting with one's own results. Benchmarks are useful with developing the criterion to determine whether the outcome has been achieved.

Action! See the **Healthy People 2020** website for benchmarks specific to DSME: <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=8>

Action! See [Part 1](#) – Planning for Your Program and Evaluation for Key Measures for this Best Practice.

B. Ensure data collection methods reflect objectives for the target population

The following sources of data for DSME evaluation are recommended:

- *Diabetes Care and Outcomes Audit* data
- iCare reports for individuals or groups of people with diabetes/at risk for diabetes
- Clinical Reporting System (CRS) data such as the Government Performance and Results Act (GPRA) and Indian Health Performance Evaluation System (IHPES), and
- other tools which address process and outcome data such as participation rates, patient confidence, and behavioral outcomes.

C. Use established tools to collect data for behavioral outcomes

Use of forms, checklists, and other tools can help diabetes educators obtain objective data to track behavioral outcomes and goal attainment. One example for tracking progress of behavioral outcomes is the AADE 7 Self-Care Behaviors(TM) goal sheet. This tool allows diabetes educators to track the individual's progress toward goal attainment for one of more self-management behaviors in an objective and consistent method. Data can be collected for reporting group outcomes related to behavior change.

Action! See AADE7(TM) resources, including the AADE 7 Self-Care Behaviors(TM) Goal Sheet, at <http://www.diabeteseducator.org/ProfessionalResources/AADE7/>

D. Incorporate continuous quality improvement (CQI) activities

CQI activities are an approach to correct program shortcomings using a rapid cycle evaluation method.

Steps in the CQI activity include; identification of a problem, data collection, data analysis, development of change strategies, implementation, and evaluation. CQI activities can be conducted at least quarterly to determine the effectiveness of the changes that were made to improve outcomes.

Action! See *CQI: A Step-by-Step Guide for Quality Improvement in Diabetes Education* (AADE) for an eight step guide to developing, implementing, and maintaining a CQI plan for diabetes education programs.

E. Conduct surveys

Surveys are methods that can be used to obtain useful feedback from individuals on outcomes related to the learning process, quality of life, confidence, and satisfaction with the program process. Generally, surveys are simple and easy to use. They can be administered in writing, face-to-face, by phone, or by mail. Results may yield reliable data, although interpretation may vary among respondents.

In addition, surveys are useful to obtain feedback from health care providers and community partners. Surveys can be conducted to obtain information which will improve DSME services, such as:

- Referral processes
- access to services, and
- unmet needs.

F. Other resources for evaluating DSME programs

Action! For more information on Program Planning and Evaluation go to:
[http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/Cr
eating/Workbook.pdf](http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/Cr
eating/Workbook.pdf)

Action! For more information on Evaluation Methods go to Centers for Disease
Control and Prevention Evaluation Working Group at <http://www.cdc.gov/eval/index.htm>

Team Notes:

Key Recommendation 3. Provide ongoing self-management support (SMS).

Why?

Many individuals receive DSME through a short term diabetes self-management education program or through brief encounters to address a specific diabetes self-management issue. These methods are not sufficient to sustain a lifetime of diabetes self-management as changes may occur in the life of the person with diabetes or at risk for diabetes. Ongoing SMS helps individuals sustain behavior to effectively manage diabetes/pre-diabetes. SMS occurs in various situations where individuals obtain care and information about their health status. This includes clinic encounters with their primary care provider and/or pharmacist, home visits with a public health nurse, community based activities, encounters with a community health worker, etc. Periodic follow-up to reassess self-management behavior and identify barriers during these encounters can assist with problem solving, assist to redefine goals (as needed), and increase the likelihood of successful self-management. SMS is the continuation of DSME services. A SMS process assures timely referrals for appropriate services and resources as situations change in the individual's lifestyle, care, and chronic condition.

How to Implement the Key Recommendation

A. Review the individual's action plan

A documented action plan for behavior is recommended to be a part of the individual's medical record for easy access to health care providers.

To assure effective SMS, review the medical record for the following:

- Initial referral for DSME services (may also consist of MNT services)
- Current action plan
 - Self-management goal
 - Progress toward completing the action plan
 - Plan for follow-up with the diabetes educator and/or health care team
 - Expected timeframe to complete action plan
- Completed action plan
 - Client's goal attainment
 - Barriers encountered during implementation of the action plan
 - Referrals for community-based SMS
 - Additional documentation provided by the diabetes educator

B. Reassess self-management behavior

Diabetes is a progressive chronic condition that lasts throughout the life span of the individual. Age, lifestyle changes, psycho-social issues, and progression of the disease process require adjustments for self-management behavior. In addition, persons at risk for diabetes may progress to being diagnosed with diabetes. **A brief targeted assessment is recommended to identify any changes which may require adaptation with self-management at each clinic encounter.**

Primary care providers, nurses, pharmacists, and other health care team members are encouraged to be familiar with the assessment process used by the diabetes educators. Try one of the following questions to begin a dialog for a brief targeted assessment:

- What concerns you most about having diabetes?
- What is the hardest thing about caring for your diabetes?
- Is there anything you can change to improve your health?

The individual's response to your question may require a referral to another source to develop an action plan for behavior change.

C. Timely referral for services and resources

A brief targeted assessment can identify a need for additional DSME services, referral to community resources to help the client sustain current self-management behavior, or referral to other services for specialized care.

A timely referral is necessary to capture the opportunity to address the issues the client has identified as being important.

A referral is a way to communicate on behalf of the individual. Some services require a signed referral by the individual's primary care provider before services can be provided.

The following information is useful to the referral source:

- diagnosis
- services to be performed
- current treatment plan
- relevant lab results (as appropriate), and
- expected outcomes.

D. Referral to community resources

Referrals to community resources, such as a personal trainer at a wellness center or a follow-up visit by a community health worker, may be necessary to provide self-management support. Providers making a referral to a community resource need to be cognizant of privacy issues and provide only appropriate information. This type of referral may be informal and there may be limited information that is shared. Collaboration between clinical services and community programs to develop methods for effective communication on behalf of the individual for self-management support is recommended.

E. Provide case management for selected individuals

Individuals at high risk for one or more diabetes-related complications will benefit from case management. Case management is a collaborative process which includes the individual and/or family member/caregiver, the primary care provider, and the case manager (such as nurse or social worker). This process includes the planning and coordination of services to achieve self-management, clinical, metabolic goals for the prevention, and/or slow the progression of a diabetes-related complication(s).

Team Notes:

Working Together with your Community and Organization

Programs also need to work on broader community and organizational support of the goals they are trying to achieve.

Community Recommendation

Key Recommendation 4. Partner with community programs for diabetes self-management education (DSME) and self-management support (SMS).

Why?

Diabetes affects communities in different ways. Individuals with diabetes or at risk for diabetes, family members, and care givers are members of the community. How the community responds to the needs of individuals with diabetes or at risk for diabetes, and/or family members/caregivers determines the level of SMS that is available. Community-based programs can provide DSME and SMS through existing resources.

How to Implement the Key Recommendation

A. Assess community resources.

The community assessment helps interested parties learn more about their community, local issues, and resources. Collaborate with the community program representatives to determine existing resources and gaps for DSME services and SMS resources. The results of a community assessment can provide direction for planning projects to develop or enhance resources for DSME and SMS.

Data collection methods for community assessments include:

- Focus groups
- Key informant interviews – interviews with selected members in a community who are involved or have knowledge of a particular situation
- Expert presentation and testimony
- Media scan – content of local media, i.e., newspapers, radio, television, and newsletters.
- Community forum – assess viewpoints or opinions of the community members
- Social survey – method to obtain information about knowledge, attitudes or practices of members of the community

B. Partner with community-based programs

Community-based programs and activities can provide DSME and SMS in a variety of settings, including:

- wellness centers
- food distribution programs
- WIC program
- CHR program, and
- social services.

Activities include awareness campaigns for diabetes prevention, presentations on self-management issues, and projects to motivate healthy lifestyles for community members. These resources can foster a supportive environment for people with diabetes or at risk for diabetes, family members, and caregivers.

C. Provide community-based DSME and SMS programs and activities

Health care professionals and paraprofessionals working in AI/AN community settings can provide culturally relevant DSME and SMS within their communities.

Public health nurses, nutritionists, fitness educators, community health representatives, and community health aides are uniquely positioned members of the health care team. They know the individuals and families who live in their communities. They speak the language, know the culture, and are familiar with local challenges. With specialized diabetes training, they can become a vital link between people with diabetes and those at risk for diabetes, and the clinical health care team. Through multi-disciplinary collaboration, they are able to integrate their knowledge of individuals, families, language, and local culture to improve individual patient outcomes, and reduce the burden of diabetes in their communities.

Note! There are evidence-based recommendations and helpful tools available for implementing community-based DSME activities. In 2009, the Partnership for Prevention released a DSME toolkit, **The Community Health Promotion Handbook: Action Guides to Improve Community Health**. The DSME Action Guide provides information on the resources and key steps to establish a community-based DSME program. It is designed primarily to assist public health practitioners in implementing evidence-based practices. Additional audiences who may benefit from using this resource include local planners, advocates, policy makers, community and business leaders, community-based organizations, educators, clinical health care providers, and others interested in improving health in their communities.

Action! Information on this toolkit is available at:

<http://www.prevent.org/Action-Guides-The-Community-Health-Promotion-Handbook.aspx>

Action! See [Key Recommendation 5](#) for Organizational Tools.

Team Notes:

Organization Recommendation

Key Recommendation 5. Provide a client-centered organization environment.

Why?

There is increasing evidence that effective diabetes self-management education (DSME) and self-management support (SMS) are essential for optimizing health outcomes for individuals with diabetes and other chronic conditions. The Chronic Care Model researchers and the Institute for Health Care Improvement have identified key practices and process that guide organizations with implementing self-management support. Self-management support includes actions by health care providers that assist the individuals and/or family member/caregiver with adopting self-management behavior. In addition, literature reviews support that optimal self-management is a product of a collaborative relationship between the individual, family member/caregiver, and the health care provider.

Action! See <http://www.icic.org/> for more information on the Chronic Care Model.

Action! See <http://www.ihc.org/> for more information on the Institute for Healthcare Improvement.

A health care organization that wants to provide effective DSME services and SMS must be motivated and prepared for change throughout the entire organization. These changes are supported through organizational goals, written policies and procedures, clearly defined roles and responsibilities of the staff, and allocation of resources.

How to Implement the Key Recommendation

A. Foster a client-centered environment.

Organizations can create a client-centered environment through policies and procedures which address the following:

- Conduct brief targeted assessments to guide SMS interventions. Assess individuals for clinical severity, functional status, self-management problems and goals, behaviors, and barriers.
- Institute a process for shared decision making to identify appropriated educational interventions which promote skill development.
- Use a non-judgmental approach during individual interactions.
- Collaboratively identify the individual's priorities, goals, and specific plans for goal attainment.
- Use methods for collaborative problem solving.
- Provide self-management support by diverse providers. Diverse professionals such as community health workers, non-licensed health care professionals, and health care professionals that are not generally part of direct patient care can effectively deliver SMS interventions when they have clearly defined tasks/roles and are trained to use appropriate interventions.

- Deliver SMS interventions in various formats. Alternative interventions which foster SMS include:
 - o Individual encounters to address unique situations
 - o Group encounters
 - o Telephone counseling
 - o Web-based tele-counseling/education
- Institute a process for ongoing follow-up go help sustain self-management behavior.
- Initiate case management for selected individuals using evidence-based guidelines and standards of care.
- Establish linkages with community based programs and resources.

B. Allocate appropriate resources for effective DSME services.

- Adequate staffing for DSME services
 - o Designate a champion to coordinate DSME and SMS services.
 - o Adequate number of trained staff to address the needs of people with diabetes/at risk for diabetes
 - o Establish a DSME team that includes primary care, diabetes education professionals, and community program representatives (as appropriate)
- Teaching space, furniture, lighting storage, ventilation, and other space considerations
- Privacy, safety, and accessibility
- Educational materials
- Opportunities for continuing education and professional development that is specific to diabetes management and education
- Time to evaluate program progress and outcomes
- Assure there is a process to orient new clinical and community staff to DSME and SMS services, and to their roles and responsibilities.

C. Explore third-party reimbursement opportunities for DSME services

Outpatient health care facilities are able to bill the Centers for Medicaid and Medicare Services (CMS) and obtain reimbursement for DSME services. In order for an organization to bill CMS, DSME services must be provided by an accredited program. The American Association of Diabetes Educators (AADE) and the American Diabetes Association (ADA) are the two certifying bodies approved by CMS with the authority to accredit DSME programs. CMS requires both National Accreditation Organizations (NAOs) to adopt the National Standards for Diabetes Self-Management Education (NSDSME) to certify DSMT programs. The NSDSME provide guidelines for quality DSME services that can assist diabetes educators from a variety of settings in providing evidence-based education.

Action! See National Standards for Diabetes Self-Management Education at:

http://care.diabetesjournals.org/content/31/Supplement_1/S97.extract

Action! DSME programs interested in applying for accreditation can obtain more information from the American Association of Diabetes Educators at <http://www.diabeteseducator.org/ProfessionalResources/accred/>

and the American Diabetes Association at <http://professional.diabetes.org/recognition.aspx?cid=57995>

IHS Division of Diabetes also provides technical assistance for DSME program accreditation at <http://diabetes.ihs.gov>

Team Notes:

PART 3 Appendices, Tools, and Resources

Appendix A. Supplemental information

1. Importance of a Diabetes Self-Management Education and Support Program

Diabetes is a chronic, progressive metabolic disease in which long-term management is required to prevent or delay complications. The health care team is part of the long-term management through brief episodic encounters. However, people with diabetes or at risk for diabetes and/or family members/caregivers provide more than 95% of their diabetes care and are responsible for the day to day management of their condition. Thus, the management of diabetes requires the individual and/or family member/caregiver to be an active participant in their care. DSME prepares them with knowledge and skills training to build the confidence they need to make complex self-management decisions. When people positively self-manage their chronic conditions, they reduce their risk for complications, and improve their quality of life.

While a person may participate in a short term diabetes self-management education program, this is not sufficient to sustain a lifetime of behavior as changes may occur in the life of the person with diabetes/at risk for diabetes. Ongoing self-management support (SMS) assists individuals to sustain behavior to effectively manage diabetes/at risk for diabetes. Periodic follow-up to reassess self-management behavior and identify barriers assist with problem solving, redefine goals (as appropriate), and increase the likelihood of successful self-management. SMS is the continuation of DSME services. Ongoing SMS assures timely referral to appropriate resources as situations change in the individual's lifestyle, care, and chronic condition.

DSME and support can affect outcomes at all levels of diabetes treatment and prevention: primary, secondary, and tertiary. DSME and SMS can:

- Inform individuals, families, and communities about the benefits of adopting healthy lifestyles to prevent or delay the onset of diabetes.
- Assist with building confidence for making behavior change to improve health and prevent or delay acute or chronic complications.
- Inform individuals, families, and communities about screening methods for early detection and treatment to prevent or delay the onset of acute or chronic complications.
- Improve metabolic outcomes such as A1C, blood pressure, and lipid levels.
- Improve quality of life as a result of positive lifestyle changes.

2. Benefits and Risks

Benefits of implementing this best practice for people with diabetes and at risk for diabetes include:

- improving metabolic outcomes
- decreasing the risk of diabetes complications
- improving quality of life, and
- informing individuals, families, and community about benefits of a healthy lifestyle to manage diabetes and prevent or delay the onset of diabetes.

There are no known risks to implementation of this best practice.

3. Health Questions Addressed by Best Practice

This best practice addresses the following questions:

1. Who are the diabetes care team members that provide DSME and SMS services?
2. What is the DSME process?
3. What resources are available to implement quality DSME services?
4. How can community programs contribute to DSME and SMS?
5. How can organizations foster an environment to support DSME and SMS?

Appendix B. Key Measures Example

Remember—this is an example! Apply this process to your community using your data.

Diabetes-related problems are increasing among our community. Our health care center and community are concerned about the risk of diabetes complications for people with diabetes

Diabetes team takes action. Our diabetes team talked about addressing this problem and how the team could be more involved. We read the Diabetes Self-Management Education (DSME) and Support Best Practice, and talked about the key recommendations.

Identified sources of data. Local data included:

- *Diabetes Care and Outcomes Audit* data
- RPMS data
- Diabetes Registry
- Medical Record review
 - o Data indicated:
 - 70% of patients with diabetes are receiving annual DSME.
 - 15% of patients who received DSME had documentation of whether they were achieving their action plans. Of these patients, 50% were meeting their clinical goals set by the health care team.
 - There was little documentation of behavioral goal achievement.
 - There was little documentation of ongoing self-management support.

Selected suitable Best Practice. After thinking carefully about our goals and resources, and reviewing data, we decided the Diabetes Self-Management Education and Support Best Practice was a good fit for us. We chose to work on three of the Key Recommendations: provide diabetes self-management education (DSME), provide ongoing self-management support (SMS), and evaluate DSME services.

Identified Target Population. We decided to start implementing this Best Practice by including all current patients listed in diabetes registry.

Identified Program goals:

- To increase the number of people with diabetes who receive DSME and SMS.
- To increase the number of people with diabetes who achieve their behavioral and clinical goals.

Identified SMART objectives based on our resources and data:

- To increase the percent of people with diabetes who receive diabetes self-management education in the past twelve months from 70% to 80% by the end of the current year.
- To increase the percent of individuals with diabetes with documented DSME who achieved one self-identified behavioral goal in the past twelve months from (0%) to 20% by the end of the current year.

- To increase the percent of individuals with diabetes with documented DSME who achieved one self-identified clinical goal in the past twelve months from baseline (0%) to 20% by the end of the current year.
- Percent of individuals with documented DSME who were referred to clinical or community resources for self-management support will increase from 0% to 20% by the end of the current year.
- To increase the percent of individuals with diabetes with documented DSME with a confidence score of 7 or greater (on a 10 point confidence scale) at DSME follow-up for at least one self-management behavior from 0% to 20% by the end of the current year.

Selected Key Measures. We chose the corresponding Key Measures for these Objectives and Key Recommendations. Data will be collected and reviewed at baseline and mid-year.

Table 1. Selected Key Measures

A. Measure	B. <u>Baseline</u> or beginning value and date (collected prior to starting activities)	C. Most recent value and date (if applicable)	D. Data source (where did these numbers come from)
1.* Percent of people with diabetes who receive documented DSME	70% as of 10/2/2011	75% as of 2/12/2011	RPMS
2.* Percent of individuals who receive DSME with one improved self-identified behavioral outcome	0% as of 10/21/2011	5% as of 2/12/2011	RPMS
3.* Percent of individuals who receive DSME with one improved self-identified clinical outcome	0% as of 10/2/2011	10% as of 2/12/2011	RPMS Diabetes Audit
4.* Percent of individuals with documented DSME who were referred to clinical or community resources for self-management support	0% as of 10/2/2011	15% as of 2/12/2011	RPMS Diabetes Audit
5. Percent of individuals with a confidence score of 7 or greater in at least one self-management behavior	0% as of 10/2/2011	3% as of 2/12/2011	Medical Record Tracking Logs

* Required Key Measures

Appendix C. Improving Diabetes Self-Management and Education and Support Programs

Remember—this is an example! Ask these questions in your community, thinking about your local needs, resources, and tracking systems.

There are four fundamental questions to ask as you plan and implement your best practice.

The following are two examples of answers to these fundamental questions for improving DSME services. The first example looks at DSME from an organizational perspective. The second example looks at DSME from the perspective of the individual with diabetes.

Example 1. DSME Organizational Perspective.

1. Who is the target population?

- People with diabetes.

2. What are you trying to accomplish?

- To establish an organizational framework to provide client-centered DSME services and ongoing self-management support (SMS).

3. How will you know if what you do makes things better?

- Collect data which demonstrates outcomes that are relative to the provision of DSME services and self-management support. Periodically review and analyze the data to plan improvement strategies as appropriate.
- Improved data suggest that things are getting better.

Examples of Process Improvements:

- In the past twelve months:
 - o 60% of individuals with a new diabetes diagnosis received DSME services.
 - o There was a 20% increase in the number of documented referrals to DSME services from selected clinical and community programs.
 - o There was a 15% increase in the number of documented referrals from DSME services to selected community programs.

Examples of Outcome Improvements:

- In the past twelve months, among people with diabetes who have completed their action plan:
 - o There has been a 20% increase in the number of people with diabetes whose mean blood pressure (three most recent measures) is $\leq 130/80$.
 - o There has been a 10% increase in the number of people with diabetes whose A1C, BP, and LDL are at goal.
 - o There has been a 20% increase in the number of people with diabetes with documented successful achievement of one or more diabetes self-management behavior goal(s).

4. What can you do to make things better?

Organizational Changes:

- Receive leadership support to foster a client-centered environment for DSME services and ongoing SMS.
- Designated an individual to coordinate DSME Services.
- Allocate appropriate resources for effective DSME services.

Clinical System Changes:

- Establish a process and develop tools to conduct a brief targeted assessment with each diabetes clinic visit.
- Health care team to have access to clinical data for people with diabetes or those at risk (such as lab, measures, and self-management goals).

Clinical and Community Changes:

Collaboration between the clinic and community program to identify available resources for DSME and SMS.

- The multi-disciplinary team works together to identify gaps in DSME services and SMS to identify realistic solutions.
- Implementation of DSME is addressed in selected community-based settings.
- Processes are developed that enhance implementation and documentation of two-way referrals among primary care, community, and DSME entities.

Example 2. The Individual's Experience of DSME

1. Who is the target Population?

- People with diabetes and at risk for diabetes.

2. What are you trying to accomplish?

- To provide client-centered DSME services and SMS.

3. How will you know if what you do makes things better?

- Use results of individual report data to enhance DSME effectiveness. Individuals with diabetes and those at risk will rate their DSME experience:
 - o "My educator asks questions to understand what's important to me."
 - o "My self-management goals address things that are important to me."
 - o "My action plans help me make the health changes that I want to make."
 - o "My educator gives me valuable information."
 - o "When the need comes up, I work with my educator to change my goals and action plans."

- In the past twelve months, individuals who have completed their action plan:
 - o have successfully changed one or more health or diabetes behaviors, and
 - o are confident they can manage and control most of their diabetes problems.

4. What can you do to make things better?

- o Test ideas that help individuals understand how important their role is in managing their health.
- o Use patient reports to enhance the effectiveness of DSME encounters.
- o Recruit two individuals with diabetes and two family members to participate actively in multi-disciplinary diabetes team activities.
- o Ask consumers to participate in identifying and assessing local programs and resources that will be included in a diabetes resource directory.

Tools and Resources

Educational Resources for People with Diabetes

IHS Division of Diabetes Treatment and Prevention Online Catalog

<http://www.ihs.gov/MedicalPrograms/Diabetes/RESOURCES/Catalog/rde/index.cfm?module=catalog>

Diabetes Easy-to-Read Series for Individuals or Clients

<http://diabetes.niddk.nih.gov/dm/ez.asp>

National Diabetes Education Program Materials for American Indians and Alaska Natives with Diabetes <http://www.ndep.nih.gov>

American Association of Diabetes Educators. Offers resources, teaching, and evaluation tools for diabetes educators. *The Art and Science of Diabetes Self-Management Education* takes a patient-centered approach to teach diabetes educators effective strategies for helping people with diabetes make behavior changes.

American Association of Diabetes Educators. AADE7(TM) Self-Care Behaviors framework. <http://www.diabeteseducator.org/>

American Association of Diabetes Educators. The Art and Science of Diabetes Self-Management Education, 2nd Edition. For examples of assessment tools and interviewing methods. View at <http://www.diabeteseducator.org/>

American Diabetes Association <http://www.diabetes.org/>

Resources for Diabetes Educators and Health Care Providers

Curricula Developed by the IHS Division of Diabetes Treatment and Prevention

Balancing Your Life and Diabetes Curriculum (IHS September 2003; Revised 2010)—This is a series of twelve training modules to be used by health professionals to provide education in a one-on-one or group setting. The curriculum provides basic information about type 2 diabetes, diabetes self-care, and general health practices.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the IHS/ Division of Diabetes Online Catalog. <http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula>

Balancing Your Food Choices: Nutrition and Diabetes (IHS April 2010) – A supplement to the Balancing Your Life and Diabetes (BYLD) Curriculum that addresses nutrition and diabetes. This supplement is intended for use with the BYLD Curriculum.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the IHS/ Division of Diabetes Online Catalog. <http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula>

Beautiful Beginnings: Pregnancy and Diabetes (IHS April 2010) – This supplement to the BYLD Curriculum addresses pregnancy and diabetes, including pre-gestational and gestational diabetes. This supplement is intended for use with the BYLD Curriculum.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the IHS/ Division of Diabetes Online Catalog.

<http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula>

Youth Being Healthy: A Type 2 Diabetes Curriculum for Teens (IHS 2010) – A curriculum to provide health professionals working with AI/AN adolescents ages 13 – 18, parents, and other caregivers with a framework for diabetes education in a one-on-one or group setting. The curriculum provides basic information about type 2 diabetes and general wellness for adolescents.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the IHS/ Division of Diabetes Online Catalog.

<http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula>

Youth Staying Healthy: A Diabetes Prevention Curriculum for Youth Ages 8 – 12 (IHS 2010) – A curriculum for health professionals working in AI/AN communities that provides a framework for diabetes prevention education for children ages eight – twelve, who are at risk for diabetes. It provides ideas for engaging parents and caregivers are included. The curriculum provides basic information about health and wellness, not about diabetes.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the IHS/ Division of Diabetes Online Catalog.

<http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=toolsCurricula>

Other Curricula

Strong in Body and Spirit! Native American Diabetes Project. University of New Mexico. This Native American-specific curriculum is designed to be led by community health workers to help people eat healthy foods and increase physical activity. <http://www.laplaza.org/health/dwc/nadp/>

Diabetes Education Curriculum: Guiding Patients to Successful Self-Management (AADE 2009) - Based upon the AADE7 Self-Care Behaviors framework. This curriculum supports diabetes educators in their efforts to help people with diabetes and related conditions learn to make daily decisions about self-care that have a positive impact on their clinical outcomes and overall health status. The Curriculum is a CD-ROM product that contains a printable PDF printable content, handouts and other tools.

This curriculum is available in print and CD ROM format. A CD ROM is included with a printed version. This curriculum is available on the AADE website

<http://www.diabeteseducator.org>

Life with Diabetes: A Series of Teaching Outlines, 4th Edition (Michigan Diabetes Research and Training Center) - The Michigan Diabetes Research and Training Center has developed a curriculum that can be used to design and implement DSME. This curriculum meets current Standards for Diabetes Self-Management Education and is published and distributed by the American Diabetes Association (ADA). <http://www.shopdiabetes.org/>

Type 2 Diabetes BASICS Curriculum Guide, 3rd Edition (International Diabetes Center Publishing 2009) – This curriculum is a four session program that is designed for patients with type 2 diabetes or pre-diabetes who have little or no previous diabetes education. It includes an instructor’s curriculum guide, CD ROM which contains session guidelines, sample data collections tools and presentation materials. Additional education materials can be ordered separately. This curriculum is available on the IDC website:

<http://www.parknicollet.com/healthinnovations/shopping/ProductDetail.cfm?productid=2058-BKIT>

Insulin BASICS Curriculum Guide, 2nd Edition (International Diabetes Center Publishing 2009) – This curriculum guide is a complete package offering teaching points, clinical guidelines, sample data collection tools, presentation materials and more. The curriculum is organized into twelve topics, making it easier to find specific topics for educators to provide one-on-one training. Additional education materials can be ordered separately. This curriculum is available on the IDC website:

<http://www.parknicollet.com/healthinnovations/shopping/ProductDetail.cfm?productid=2058-BKIT>

Gestational Diabetes BASICS Curriculum Guide, 2nd Edition (International Diabetes Center Publishing 2009) – This curriculum provides the tools women need to manage their gestational diabetes and achieve healthy outcomes. The curriculum contains session by session content, suggested teaching tips, treatment guidelines, and sample data collection tools. Additional education materials can be ordered separately. This curriculum is available on the IDC website:

<http://www.parknicollet.com/healthinnovations/shopping/ProductDetail.cfm?productid=2058-BKIT>

U.S. Diabetes Conversation Map® (Healthy Interactions, Inc.) – The Conversation Map tool combines a series of images and metaphors on a 3-foot (one meter) by 5-foot (1.5 meters) tabletop display. It serves as a facilitation tool for health care professionals to use to engage people in conversations around a health care topic such as diabetes, heart health, or obesity. This curriculum was created by Healthy Interactions, Inc. in collaboration with the American Diabetes Association.

<http://www.healthyinteractions.com/us/en/diabetes/hcp/about/conversationmaptools>

Living Well Alaska Leader Course (University of Alaska Fairbanks Cooperative Extension Service) - This course prepares participants to lead a six-week chronic disease self-management program in their communities. The program is ideal for CWAs who want to provide support for individuals with chronic conditions such as diabetes and can be built into diabetes or heart disease education programs. It is designed to be led by non-experts, allowing individuals with chronic conditions to develop self-efficacy and habits for self-care. Implementing the program in the community is easy and training can be provided to professionals or community volunteers. The State of Alaska DHSS and Cooperative Extension Service will help with program supplies and outreach; travel support may be available for the three and one-half day training. For more information, contact:

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Organizational Tools

The Art and Science of Diabetes Self-Management Education, 2nd Edition (AADE). This publication offers resources, teaching, and evaluation tools for diabetes educators. It takes a patient-centered approach to provide diabetes educators with effective strategies for helping people with diabetes make behavior changes. It is based on the AADE7(TM) Self-Care Behaviors framework. The publication is available in a variety of formats; print edition, CD ROM for individual users, print and CD ROM combo, E-book single user and multi-user license. This publication can be obtained from the AADE website: <http://www.diabeteseducator.org/>

CDC Division of Diabetes Translation. Provides data and trends on diabetes, a variety of informational materials (e.g., fact sheets, brochures, reports), and links to diabetes projects. <http://www.cdc.gov/diabetes>

IHS Division of Diabetes Treatment and Prevention. Offers DSME program recognition and a variety of educational materials tailored for American Indians and Alaska Natives. <http://www.ihs.gov/MedicalPrograms/Diabetes/index.asp>

National Diabetes Education Program. Offers information and materials for diabetes awareness campaigns, resources for health care professionals and American Indians and Alaska Natives with diabetes and those at risk, and toolkits for community programs and partnerships to promote diabetes education. <http://www.ndep.nih.gov>

Partnership for Prevention. Diabetes Self-Management Education (DSME): Establishing a Community-Based DSME Program for Adults with Type 2 Diabetes to Improve Glycemic Control—An Action Guide. The Community Health Promotion Handbook: Action Guides to Improve Community Health. Washington, DC: Partnership for Prevention; 2009. <http://www.prevent.org/actionguides/DiabetesProgram.pdf>

Robert Wood Johnson Foundation Diabetes Initiative. Provides links to DSME programs, training and assessment materials, and a section on “lessons learned” submitted by grantees. <http://diabetesnpo.im.wustl.edu/index.html>

Web-based Resources

IHS Division of Diabetes Treatment and Prevention [Internet]. Creating Strong Diabetes Programs: Plan a Trip to Success. An on-line training course on effective program planning and evaluation. [Developed 2009, July] <http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=trainingBasicsCreating>

IHS Division of Diabetes Treatment and Prevention [Internet]. Creating Strong Diabetes Programs: Plan a Trip to Success. A workbook (to accompany on-line training course above) on effective program planning and evaluation. [Developed 2006, July] <http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Training/WebBased/Basics/Creating/Workbook.pdf>

American Association of Diabetes Educators Diabetes Education Accreditation Program
<http://www.diabeteseducator.org/ProfessionalResources/accred/>

American Diabetes Association <http://www.diabetes.org/>

The American Diabetes Association (ADA) funds research; publishes scientific findings; provides information and other services to people with diabetes, their families, health care professionals, and the public; and advocates for scientific research and the rights of people with diabetes. ADA's Native American Program, Awakening the Spirit, provides information specific to Native Americans, and conducts advocacy and recognition of excellence in diabetes prevention and treatment services in American Indian and Alaska Native communities by sponsoring the annual SDPI "Voices for Change" Awards Program.

<http://www.diabetes.org/communityprograms-and-localevents/nativeamericans/awakening.jsp>

American Diabetes Association Education Recognition Program

<http://professional.diabetes.org/recognition.aspx?cid=57995>

American Dietetic Association

The American Dietetic Association is the nation's largest organization of food and nutrition professionals. Its mission is to promote optimal nutrition and well-being for all people by advocating for its members. <http://www.eatright.org/>

CDC Division of Diabetes Translation provides data and trends on diabetes, a variety of informational materials (e.g., fact sheets, brochures, and reports), implements the National Diabetes Education Program, and provides links to diabetes projects.

<http://www.cdc.gov/diabetes>

Diabetes Initiative of the Robert Wood Johnson Foundation provides links to DSME programs, training and assessment materials, and a section on "lessons learned" submitted by grantees. <http://diabetesnpa.im.wustl.edu/index.html>

Institute for Healthcare Improvement. Improvement Methods. Describes the basics of the continuous quality improvement (CQI) process. The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change in the real world setting—by planning it, trying it, observing the results, and acting on what is learned.

<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/>

National Diabetes Education Program

<http://www.ndep.nih.gov>

<http://www.cdc.gov/diabetes/ndep>

<http://www.diabetesatwork.org>

<http://www.betterdiabetescare.nih.gov>

<http://www.YourDiabetesInfo.org>

The National Diabetes Education Program brings together public and private partners to improve treatment and outcomes for people with diabetes, promotes early diagnosis, and prevents the onset of type 2 diabetes. It promotes awareness and education activities and quality care. The Website provides tools for educating health care providers and individuals with diabetes, and those at risk for diabetes.

National Diabetes Information Clearinghouse

The NIDDK's National Diabetes Information Clearinghouse (NDIC) is an information and referral

service designed to increase knowledge about diabetes among people with diabetes, those at risk, and their families, health care professionals, and the public. <http://diabetes.niddk.nih.gov>

HRSA Health Disparities Collaboratives

The Health Disparities Collaboratives is a program that includes the Bureau of Primary Health Care, Institute for Healthcare Improvement, National Association of Community Health Centers, Inc., and other strategic partners to generate and document improved health outcomes for underserved populations; transform clinical practice through models of care, improvement, and learning; develop infrastructure, expertise, and multi-disciplinary leadership to support and drive improved health status; and build strategic partnerships. <http://www.healthdisparities.net>

Examples of Current Best Practice Programs

Sells Hospital Diabetes Self-Management Education Program

IHS Sells Service Unit
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Muscogee Creek Nation: Educating Partners in Care (EPIC)

Okmulgee Health Center
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Additional Contacts

Contacting other people involved in DSME programs is important because they can help you get started. Your peers at other health care organizations can share their expertise, materials, and ideas and can tell you what has worked for them and what has not worked. This can help you avoid reinventing the wheel. Here are some tips on how to connect with others:

Area Diabetes Consultant website:

<http://www.ihs.gov/MedicalPrograms/Diabetes/index.cfm?module=peopleADC>

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