

IHS Best Practice Model

Diabetes Self-Management Education

Why is this important?

Diabetes self-management education is a key element of diabetes prevention and treatment. People with diabetes and their families need to learn and practice new lifestyle skills, including monitoring their blood sugar, making food choices, and being more active. These skills are important not only in managing diabetes, but also in preventing or delaying diabetes complications. The importance of education in diabetes self-management is widely recognized. Medicare, the major health insurer for older Americans, now covers diabetes education. People with diabetes must be active participants in the educational process, setting learning and behavioral goals that meet their individual physical, emotional, and lifestyle needs. Incorporating cultural methods of sharing ideas and skills may be the single, best way of helping people with diabetes and their families learn about diabetes self-management practices.

What measures are used?

The Indian Health Diabetes Care and Outcomes Audit measures documentation of nutrition, exercise, and general diabetes education. Audit trends show that more than 50 percent of people with diabetes receive diabetes education each year. The Healthy People 2010 objective is that 60 percent of people with diabetes receive formal diabetes education.

What are Standards and Best Practice models for diabetes education programs?

Recognized standards for diabetes education programs in Indian Health Service communities are: the Indian Health Integrated Diabetes Education and Care Standards and the National Standards for Diabetes Self-Management Education (in *Diabetes Care*, January 2001).

Key scientific evidence related to this topic are:

- Transtheoretical Model (TTM); Readiness for Change; Precontemplation, Contemplation, Preparation, Action, and Maintenance;
- Empowerment Model: four-step model patient empowerment models based on counseling psychology--helping patients explore issues related to diabetes care, personalizing the problem, helping patients focus on emotions and the meaning of concerns, clarifying health-related values and establishing goals, and helping patients develop and commit to a specific plan to achieve goals;
- Self-efficacy (refers to a person's confidence in carrying out self-care tasks);
- Health belief model (compliance model);
- Self-determination (or autonomy motivation)--the psychological process that drives patient behavior change (the term "autonomy support" refers to actions by health care professionals that enhance patient autonomy motivation);
- Social action model ("It takes a village");

- Models that are appropriate for family/community oriented groups (*Diabetes Educator* article regarding Hispanics and diabetes intervention models).

Best practice in self-care science includes the following concepts:

- Team approach,
- Self-monitoring of blood glucose (SMBG),
- Control of blood sugar reduces complications (Diabetes Control and Complications Trial and the United Kingdom Prospective Diabetes Study),
- Hypertension control reduces the risk of cardiovascular disease and complications, and
- Diabetes education is critical.

Community intervention Best Practice models include:

- “Strong in Body and Spirit” (University of New Mexico with American Diabetes Association);
- “Partners in Care,” UNM evaluating intervention, available by fall;
- “IHS Diabetes Curriculum” ;
- “ADA Living Well With Diabetes, modified culturally specific” (Albuquerque IHS Diabetes Program);
- “Beginning Steps Toward Diabetes Self Care,” IHS Oklahoma Diabetes Program;
- “Take Charge” (Centers for Disease Control and Prevention--contact Dawn Satterfield);
- “Staged Diabetes Management” (International Diabetes Center);
- “Awakening the Spirit” (American Diabetes Association);
- “Wizdom” (ADA for Children).

What lessons have we learned about effective diabetes education programs?

- “Lessons learned from this pilot study should enable better diabetes prevention effects in the Pimas. Future lifestyle intervention studies need to take further account of local cultural and values and more effectively address potential constraints to participation such as patient preference and socioeconomic factors” (*Randomized Clinical Trial of Lifestyle Interventions in Pima Indians: a Pilot Study, 1998*);
- The diabetes team must include persons other than health professionals such as community members (i.e., CHR’s, medicine men, mental health workers, etc.);
- Time paradigm;
- Diabetes educational materials must be culturally specific, tribal specific, and modifiable (*Roubideaux article; Gilliland DM, Spectrum 11:166-174, 1998; Glasgow DM, Diabetes Care 22:832-843, 1999*)—for example, misunderstanding of food guide pyramid as the top being the best;
- Self-care programs need to include a comprehensive approach (i.e., psychosocial, family, clinical, community, and cultural);
- Tribal leader involvement is critical;
- Child care and transportation issues are important;

- Barriers related to access, for example, hours of operation, are important;
- Denial, anger, fear, shame are still issues in the community;
- Tribal diabetes (health) liaison on the Tribal Council is important for ongoing support/discussions.

What are the perceived main challenges and roadblocks to implementation of diabetes education programs?

- Lack of trained professionals and staff;
- Lack of consistent messages among health professionals;
- Lack of effective pilot-testing and validation of theoretical models in Native American communities;
- Community perception of diabetes (denial, anger, fear, shame are still issues in the community.);
- Lack of effective tribal leader involvement and acknowledgement of diabetes as an important issue;
- Lack of knowledge about how to effectively engage tribal leadership in ongoing dialog about diabetes for community well being;
- Lack of personal responsibility (engagement) for diabetes self-care.

What level of education in diabetes self-management should you provide?

Education in diabetes self-management is provided at three levels—basic, intermediate, and comprehensive. An evaluation component should be present for each level. The goals, objectives, and program components for each level are listed below.

Basic Level:

Goal: Increase community awareness of the burden of diabetes.

Objectives:

- Early Identification for persons at risk for diabetes.
- Enhance open communication about diabetes as a public health issue-- important for families and communities and one with many prevention and treatment options.

Program Components:

- Indian Health Service Diabetes Standards of Care;
- IHS Educational Curriculum”;
- Integrated Diabetes Education and Care Standards for American Indian and Alaska Native Communities” (including appointment of a diabetes coordinator, diabetes registry, defined community, and identification of the diabetes health care team);
- Standardized screening guidelines (American Diabetes Association screening guidelines, Jan. 2001);
- Early referral system for diabetes education and self-management;
- Access to home glucose monitoring;

- Basic diabetes training for support and clinical staff, including educating patients about their own lab work (HbA1c) and annual lipids;
- Active community awareness;
- Address language barriers;
- Evaluation component;
- Collaboration with outside agencies and inter community agencies.

Intermediate level:

Goal: Empower persons with diabetes to participate in diabetes self management.

Objectives:

- Provide comprehensive diabetes care and education services;
- Enhance open communication about diabetes as a public health issue--important for families and communities and one with many prevention and treatment options.

Program Components:

- Indian Health Integrated Diabetes Education and Care Standards for American Indian and Alaska Native Communities;
- IHS Educational Curriculum;
- Indian Health Diabetes Care and Outcomes Audit;
- Diabetes basic and diabetes surveillance;
- Multidisciplinary team;
- Evaluation component.

Comprehensive level:

Goal: Improve the Quality of Life for people with diabetes and their families and communities.

Objectives:

- Prevent or postpone complications (morbidity) and mortality for people living with diabetes;
- Enhance open communication about diabetes as a public health issue--important for families and communities and one with many prevention and treatment options;
- Attain some type of diabetes education program accreditation--either ADA or IHS.

Program Components:

- All of the above, plus
- Clinic case management connected to public health management (example., PHN) connected to tribal health (CHR and other tribal programs) and tribal leadership;
- A plan for accreditation/recognition.

Who should be the target populations for self-management education?

It is important to have a base level of diabetes education within the community at large for people at risk, people with diabetes and their families, and tribal programs and leaders in primary, secondary, and tertiary prevention. (Example: Partners in Care). Each of these levels can be targeted separately on a small or large scale, or you can establish an overall program that brings in all segments in a comprehensive community program. Major target populations include:

- Individuals with diabetes (self-care education, secondary or tertiary);
- Family (primary prevention or support to family member for self-care);
- People at risk (primary prevention);
- Health care providers (same messages);
- Tribal health workers (CHR's) (education and support self-care for individual with diabetes as secondary or tertiary prevention AND/OR support primary prevention);
- Other community tribal programs (i.e., Head Start, WIC, Tribal Schools, Food Distribution, Title V);
- Tribal leaders.

What are methods of assessment and what elements should be included in assessing your program?

Assess your current program:

- Is there a registry (manual, electronic)?
- Are chart audits being done?
- Is there a clinic diabetes team?
- Is there a community diabetes team?
- What tribal programs exist?

Use community surveys:

- Social Capital Assessment (Nina Wallerstein, Ph.D., UNM and Jemez Pueblo and other NM communities);
- Ask local IRB or university for assistance (Dine College or other tribal college student and technical resources);
- Assess need for coordination rather than competition among clinical and community programs;
- How available are resources (access to space, personnel, materials; tribal leadership support and support of other tribal programs; clinic staff support);
- What technical assistance is available locally and regionally and nationally?

Use your diabetes registry to identify people who don't access services and to identify use of secondary/tertiary services (i.e., eye appointments, foot checks).

Use chart audits to assess areas of need (gaps).

Basic data elements for evaluation:

- Registry (manual or automated) showing number of newly diagnosed patients and how many currently accessing care and the number of people with diabetes and how many currently accessing care;
- Standards of Care Chart Audit to: show the percentage who receive diabetes education (any diabetes education), track elements targeted (e.g., eye intervention, did eye checks increase?), show the percentage of patients doing self-monitoring, show average HbA1c and blood pressure control and average BMI;
- Community Screening, including numbers of community events (screening), how many people participated, number referred for services/evaluation, and other information shared at the screenings;
- The following self-care measures:
 - Monitoring:
 - number who get monitors
 - number who are monitoring once/week
 - number who monitor >2X/week
 - Physical Activity:
 - number with diabetes who access Wellness Center (attendance logs)
 - number who engage in physical activity 3X/week
 - Nutrition:
 - number of nutrition/cooking classes offered
 - attendance at nutrition/cooking classes
 - reports of changed behavior (using information/recipes from classes)
 - Overall Wellness Activities:
 - participation in community diabetes wellness activities (attendance logs)
 - Medication:
 - pharmacy refills
 - “Do you know the name of your medicine?”
 - Clinic visits:
 - tracking lost to follow-up
 - percent who bring log to clinic
 - Knowledge questions:
 - “Do you know your BP (HbA1c, cholesterol) number?”
 - “Do you know the name of your medicine?”
 - “Do you check your feet every day?”
 - Attitudes:
 - confidence in ability to do self care behaviors
 - being able to talk to family members about diabetes
 - Quality of life:
 - questions related to Quality of Life
 - Dental care:
 - Percentage who get regular dental care

What issues should you consider in preparing your proposal?

Administrative issues:

- Does your program plan identify a clear target population?
- Does your program plan outline an intervention that includes goals, objectives, activities, and a timeline?
- Does your evaluation plan include measurable goals and objectives and process and outcome measures?
- Do you include CVs for your proposed personnel, identify your program coordinator or director, and outline a recruitment plan for new employees?
- Have you included an organizational chart showing connections between your program and the clinic or tribes, and does the chart explain how these elements will work together?
- Does your proposed budget include self-monitoring supplies and equipment, educational materials, food for food demonstrations, and food models?
- Do you show adequate resources for your program, including space for activities, tribal resolution or support, or a community advisory group (list potential members)?

Programmatic issues:

- Is there coordination among existing programs? Do you show evidence of partnership among clinic, tribal leadership, and tribal programs and evidence of unique collaborations (e.g., tribal colleges, universities, national organizations, nonprofit organizations, extension agencies, public schools, etc.)?
- Do you outline a staff development plan (professional and paraprofessional) that could be included in your recruitment plan?
- Do you have a plan for how your staff will collect evaluation and tracking information (data management)? Are personnel allocated for this activity?

Content issues:

- Does your program content include training in diabetes self-care (professional and paraprofessional)?
- Does your proposal show evidence of education curriculum/program?
- Do you include treatment models?
- Do you express willingness for technical assistance in program development, implementation, and evaluation?
- Does your proposal show how you will access local, regional, and national professionals and resources?
- Does your proposal show evidence of those linkages?
- Do you include a multidisciplinary, balanced team of professional and paraprofessionals as part of the staffing program?