Developed by the Standards Revision Committee of the IDF Consultative Section on Diabetes Education

International Standards for Diabetes Education

Third edition

unite for diabetes

International Diabetes Federation

The mission of the International Diabetes Federation is to promote diabetes care, prevention and a cure worldwide

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The first edition of the International Standards for Diabetes Education was published in 1997. This document is a revision of the second edition published in 2003.

This edition of the International Standards for Diabetes Education is available in book form in English and in Turkish, on CD-ROM in English, French, Spanish, Arabic, Russian, Chinese and Turkish. Order your copy from the IDF bookshop at www.idf.org/bookshop.

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International Diabetes Federation

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Foreword

This document represents a revision of the International Standards for Diabetes Education, published in 2003 by the International Diabetes Federation (IDF) Consultative Section on Diabetes Education. This edition is based not only on the earlier versions of the Standards, but also on recent evidence in the diabetes educational, behavioural and psychosocial literature, comments and feedback from diabetes educators from both developing and developed countries about their experiences with the Standards, and published standards for diabetes education from around the world. As a result, we believe that these Standards reflect the current understanding about and practice of diabetes education.

Diabetes self-management education and ongoing self-management support are critical components of effective diabetes care, and significant contributors to metabolic and psychological outcomes. These Standards provide a basis to ensure that the education and support received by individuals with diabetes and those at risk for diabetes are of the highest quality. While it is not expected that all diabetes services can meet all of the recommended criteria, it is hoped that these International Standards for Diabetes Education can be used to guide the development and continued improvement of diabetes self-management education and support. The many people around the world who live with diabetes each and every day deserve no less.

Martha M Funnell, MS, RN, CDE
Chair, Standards Revision Committee

Every person with diabetes, no matter where they live in the world, deserves access to high-quality diabetes education delivered by skilled clinicians. Serving as a basis for the development of high-quality diabetes education services, this document will guide the healthcare provider in such areas as leadership, communication, documentation, the need for ongoing professional education, physical requirements for the provision of services, evaluation and research. The standards outlined are evidence-based and comprehensive, and will serve as benchmarks against which the quality of the care delivered by organizations and individual clinicians can be evaluated. While a few of the indicators that require more formal processes may not be usual practice in some countries, clinicians should not worry that these standards are not being met; it is the spirit in which the standards are written that is important. Our ultimate goal is to reduce the burden of diabetes on individuals, families, communities and healthcare systems.

I am delighted with the new International Standards for Diabetes Education and believe this document will be a very valuable tool to assist healthcare providers worldwide in establishing, evaluating and improving their diabetes education services. In particular, I would like to thank sincerely Martha Funnell and Helen McGuire for their hard work as editors-in-chief, and their industrious working party. I also extend my appreciation to the eclectic mix of healthcare professionals from around the world who commented on drafts, enabling this document to be truly international.

Marg McGill, RN, MSc (med)
Senior Vice-President, IDF
Chair, IDF Consultative Section on Diabetes Education (2000-2009)

Introduction

The primary objective of this document is to promote high-quality diabetes self-management education (DSME) and ongoing diabetes self-management support (DSMS) for those affected by diabetes and those at risk for diabetes throughout the world.

Belief statement

We believe that every person affected by or at risk of diabetes has the right to receive high-quality DSME and care. Therefore, countries and regions need to be proactive by making high-quality diabetes self-management education a priority within their national programmes.

The purpose of DSME and ongoing DSMS is to prepare those affected by diabetes to make informed decisions, cope with the demands of living daily with a complex chronic disease, and make changes in their behaviour that support their self-management efforts and improve outcomes. The ultimate goal is to reduce the burden of diabetes on individuals, families, communities and the healthcare systems, and, by supporting good health, prevent or delay the onset of diabetes or related long-term complications.

Goals

The long-term goals of the International Standards for Diabetes Education are to:

- decrease the burden for those at risk for or living with diabetes and their family and/or others who provide support
- optimize access and equity of DSME and DSMS for those affected by diabetes
- reduce the economic burden of diabetes at individual and societal levels
- increase the capacity of countries to respond to the global epidemic of diabetes
- increase community awareness of diabetes in order to reduce discrimination and promote healthy communities
- facilitate the integration of high-quality DSME and ongoing DSMS into diabetes care.

It is hoped that the International Standards for Diabetes Education will support individuals, organizations and policy makers to:

- **assist in planning diabetes self-management services**
- **prioritize and maximize the allocation of resources**
- **support the rationale for and advocacy efforts in support of funding and recognition for DSME as an integral component of diabetes care**
- **guide the design and redesign of systems to incorporate DSME and ongoing DSMS into diabetes care**
- **provide a benchmark against which the quality of the care and education delivered by organizations and individual diabetes educators can be evaluated**
- **provide a basis for accrediting organizations and assist individual diabetes educators to acquire the necessary skills and credentials**
- **identify the competencies required of those who deliver DSME**
- **provide a basis for the ongoing evaluation and improvement of diabetes education and care services**
- **provide a structure or framework to establish or further develop DSME and DSMS services**
- **provide a structure or framework to increase the number of qualified personnel to provide DSME and ongoing DSMS.**

Scope

The standards contained in this document reflect the mission and philosophy of the IDF Consultative Section on Diabetes Education. It is not intended that these International Standards for Diabetes Education be adopted to the exclusion of existing regional or national standards. Regions or nations that have developed their own standards should continue to use them but may want to integrate components of the International Standards for Diabetes Education.

In addition, these standards were not designed as a 'how to' guide for programme development. Rather, they provide an evidence-based framework upon which to create high-quality DSME and DSMS services and offer options for indicators to measure quality. Regions or countries where formal diabetes education is a relatively new service, or where resources to support DSME and DSMS are scarce, might choose to begin by concentrating on one area as they develop diabetes education services and work towards the creation of a comprehensive educational programme. For example, some DSME services begin by creating the structure of their programmes; others provide education and use the outcomes and quality measures as a guide for further programme structure and processes.

These standards do not describe a curriculum or the content of DSME programmes. The curriculum and content should be relevant to the identified needs of the population served, and developed and delivered so that the outcome standards can be accomplished.

For more information, please see the International Curriculum for Diabetes Health Professional Education – available free of charge from www.idf.org or the IDF Executive Office (166 Chaussée de la Hulpe, 1170 Brussels, Belgium).

Evidence

The International Standards for Diabetes Education are based on the available evidence about DSME, DSMS and behaviour change.[1] A summary of this evidence is as follows:

- DSME is effective for improving clinical outcomes and quality of life – at least in the short term.[2-11]
- Diabetes education has evolved from primarily didactic presentations to more theoretically based empowerment models.[5,12]
- There is no single best educational programme or approach. However, programmes incorporating behavioural and psychosocial strategies have demonstrated improved outcomes.[10,13-15] Additional studies show that age- and culturally appropriate programmes improve outcomes,[10-11,16-21] and that group education is at least as effective as individual education.[6,8-9,21-22]
- Ongoing support is critical in order to sustain participants' progress resulting from DSME.[5,10-11,17,23-24] People with diabetes experience a significant amount of psychological distress at the time of diagnosis and throughout their life, and these psychosocial issues affect their self-management efforts.[10,26-27]
- Strategies such as self-directed goal-setting and problem-solving are effective for supporting behaviour change.[11,28-31]

Components of the International Standards for Diabetes Education

Standards

These standards are designed to address the structure, process and outcomes of DSME services.

Structure standards provide the framework for a diabetes service. They describe the personnel, resources and physical structure that should be in place in order to provide DSME services.

Process standards describe the process of DSME and the steps required in preparing for, implementing and evaluating diabetes education.

Outcome standards describe the overall objective of DSME. If a service has been successful, it will be able to measure and meet the stated outcome standards.

Indicators

Each standard includes indicators that are designed to be used by the DSME service, the DSME advisory committee, government agencies and other certifying organizations in order to determine whether the International Standards for Diabetes Education are being met. *It is not anticipated that a diabetes service will be able to achieve all of these indicators*. Rather, these are identified as appropriate measures to document the achievement of these standards. Only those indicators that are most relevant to the population and resources available should be pre-designated as measurement criteria.

Structure standards

Organizational support

Standard

S.1. There is evidence of organizational/institutional support for DSME as an integral part of diabetes care.

Indicators

S.1.a. DSME is recognized by the organization's leadership as an integral part of all diabetes services.

S.1.b. DSME is an integral component of the strategic plan for diabetes services.

S.1.c. DSME is clearly part of the mission statement of the diabetes services.

S.1.d. DSME is clearly shown in the organizational structure of the diabetes services.

S.1.e. The DSME programme has a specific and sufficient budget in the financial plan of the diabetes services.

S.1.f. Quality indicators of the diabetes services include DSME outcomes.

S.1.g. Funds are made available to pay personnel to provide education to people with diabetes.

S.1.h. Personnel are given time to provide education to people with diabetes.

S.1.i. Personnel have access to teaching tools to provide education to people with diabetes.

S.1.j. Personnel are accountable for the education they provide to people with diabetes.

Co-ordination

Standard

S.2. One person is responsible for the organization and administration of DSME services to ensure that the process and outcome standards are met.

Indicators

S.2.a. The person responsible for the organization and administration of DSME services is clearly identified as the coordinator.

S.2.b. The coordinator has received training in diabetes care and DSME.

S.2.c. Responsibilities for managing personnel and budget (if appropriate) are clearly stated.

S.2.d. Lines of communication and authority are clearly defined within the diabetes services and throughout the organization.

S.2.e. Decisions about the allocation of human resources are made based on the best interests of people with diabetes and professional practice.

S.2.f. The coordinator maintains an environment that supports the educators' abilities to provide high-quality services that are safe, effective and ethically sound.

S.2.g. The coordinator maintains an environment that integrates continuing professional learning, programme outcomes and research evidence.

Physical space and equipment

Standard

S.3. The quality and availability of physical space and educational resources affect learning and are based on individual/community needs.

Indicators

S.3.a. Physical space and resources include:

- privacy and confidentiality
- adequate space to provide individual or group education
- comfortable seating, lighting and air quality
- a safe environment that is free of any hazards
- waiting rooms
- toilet and bathroom facilities
- accessibility for people with physical disability
- teaching tools and audiovisual resources that are appropriate for the literacy levels and culture of the people served.

S.3.b. Communication technology and appropriate equipment to support the multidisciplinary team are available. These include:

- effective communication systems – such as a telephone service
- office supplies and equipment
- a record-keeping system
- access to computers
- access to fax
- access to Internet/e-mail
- translation services.

Advisory committee

Standard

S.4. An advisory committee ensures that the views and values of all stakeholders are represented in the ongoing planning and delivery of DSME.

Indicators

S.4.a. The advisory committee represents the target population and the wider community. Committee members may include:

- a person with diabetes
- the carer of a child with diabetes
- a community leader
- a specialist physician/clinician
- a primary care physician/clinician
- a home care nurse or visiting nurse
- a nurse working in inpatient services in the community hospital
- a diabetes nurse specialist
- a dietitian from the DSME service
- other healthcare professionals from the DSME service
- a leader of relevant community programmes
- a member of the local diabetes association
- a community or 'lay' health worker
- a peer mentor

- a school teacher
- other team members as appropriate.

S.4.b. Written guidelines are developed to guide the committee's processes and delineate its responsibilities.

S.4.c. The committee annually reviews the DSME programme against the stated goals and outcomes.

S.4.d. The committee has the authority to make recommendations for improvements based on the evaluation of outcomes, the changing needs of the community, and innovations in diabetes management and education.

S.4.e. The committee meets at least twice a year; minutes are kept and reviewed for progress on action items at each meeting.

S.4.f. The committee advocates for ongoing support for the DSME programme within the institution, and from other agencies and organizations.

S.4.g. There is an established link to agencies and organizations where decisions about diabetes services are made – such as regulatory and government agencies.

S.4.h. As well as leadership skills, advisory committee members have either professional expertise in or personal experience with diabetes.

The team and teamwork

Standard

S.5. Multidisciplinary teamwork and communication are evident among those providing DSME and diabetes care services.

Indicators

S.5.a. An appropriate infrastructure of qualified and experienced personnel exists, including health professionals, clerical, administrative and other staff members.

S.5.b. The core DSME team consists of:

- a person with diabetes
- a nurse
- a dietitian or nutritionist
- a physician.

Other team members may include:

- a pharmacist
- a psychologist, counsellor and/or social worker
- a podiatrist/chiropodist
- an exercise physiologist
- a community or lay health worker
- peer mentors.

S.5.c. Teamwork is evident through:

- respect for the expertise of all team members
- good communication among team members
- open discussions regarding diabetes management, decision-making, problem-solving and setting priorities
- a collaborative approach to the pursuit of programme goals and outcomes
- consistent provision of uniform DSME information from all members of the team.

S.5.d. Staffing permits time for:

- individual assessments
- DSME delivery
- ongoing follow-up as needed.

S.5.e. People with diabetes receive timely referrals, when needed, to other healthcare professionals, such as pharmacists, medical specialists, social workers, psychologists, podiatrists/chiropodists or physiotherapists, as well as community or lay health workers, peer mentors and others.

S.5.f. An effective communication system is implemented to ensure that information is shared with all team members.

S.5.g. Consistent professional and clinical policies and procedures are known and followed by all members of the team.

S.5.h. The practice of diabetes education is recognized as a specialty within each profession.

Professional skill and continuing education

Standard

S.6.1. Personnel involved in DSME have a sound clinical understanding of diabetes, and are knowledgeable about teaching and learning methods and diabetes care.

Indicators

S.6.1.a. Personnel who deliver DSME have received initial training in teaching and counselling skills, behavioural interventions and diabetes care.

S.6.1.b. Training courses for people specializing in DSME are consistent with the IDF International Curriculum for Diabetes Health Care Professional Education, or recognized by local authorities.

S.6.1.c. DSME personnel are competent in providing education for people with type 1 diabetes and type 2 diabetes both individually and in groups.

S.6.1.d. Personnel providing DSME for specific populations (such as children and adolescents, women with gestational diabetes and/or pregnancy complicated by diabetes, elderly people, or those using pump therapy) have training and expertise specific to the special and changing needs of those populations.

Standard

S.6.2. The competence and performance of personnel involved in DSME are reviewed at least annually, and an individual learning and development plan implemented to strengthen knowledge, skills and attitudes.

Indicators

S.6.2.a. Coordinators of the DSME service share responsibility with other managers and administrators for providing opportunities to personnel for continuing education and performance improvement.

S.6.2.b. The qualifications, roles and responsibilities of DSME personnel are clearly documented.

S.6.2.c. DSME personnel receive written feedback on their professional practice from the DSME service coordinator, colleagues and people with diabetes.

S.6.2.d. On an annual basis, DSME personnel participate in continuing professional development related to diabetes education and care.

S.6.2.e. There is written evidence that DSME personnel have received continuing education provided by accredited bodies.

Standard

S.6.3. Professional DSME personnel are appointed based on demonstrated competencies – not on a rotational basis.

Indicators

S.6.3.a. There is no evidence of the removal of professional personnel from the DSME service to fill vacancies in other areas.

S.6.3.b. Strategies such as awards or promotions based on performance are in place to support the retention of personnel.

Curriculum

Standard

S.7. Diabetes education covers topics based on individual assessment, and fosters the acquisition of knowledge, skills, behaviours and coping strategies that are needed for optimal self-management of diabetes.

Indicators

S.7.a. A written curriculum with criteria for learning outcomes provides the basis for the educational programme. The assessed needs of each individual will determine which content areas are delivered and the degree of detail required. Suggested content areas are:

- the role, rights and responsibilities of the person with diabetes
- integrating psychosocial adjustment into daily life
- describing the diabetes disease process and treatment options
- incorporating culturally appropriate nutritional management into lifestyle
- incorporating physical activity into lifestyle
- managing medications (if applicable) for safety and therapeutic effectiveness

- monitoring blood glucose, urine or blood ketones (where appropriate), and using the results for self-management
- preventing, detecting and treating acute complications
- preventing (through risk-reduction behaviour), detecting and treating chronic complications
- setting goals and creating action plans
- problem-solving
- how and where to obtain diabetes supplies
- the importance of ongoing DSMS
- how and where to obtain ongoing DSME, DSMS and diabetes care
- information about community resources, consumer organizations, and DSMS services and groups
- information about the roles of the members of the diabetes team and how to work with and contact them.

S.7.b. The curriculum includes:

- key content areas and information
- objectives and target outcomes
- an outline of how the information will be delivered
- educational strategies
- who will deliver education
- evaluation strategies
- a description of educational materials to be used
- target self-management skills.

S.7.c. The content of the curriculum is adapted to meet the specific needs of the population served.

S.7.d. The curriculum is reviewed annually by the advisory committee and revised to reflect the most up-to-date evidence.

Support systems

Standard

S.8.1. Strategic partnerships and referral pathways are developed in order to improve communication and the consistency of services among healthcare professionals, and to maximize the impact of diabetes resources.

Indicators

S.8.1.a. The DSME service is connected to other healthcare organizations in the primary, secondary and tertiary settings – such as general practitioners, medical specialists, psychological and social services – so that people with diabetes can access multidisciplinary services as needed.

S.8.1.b. Communication channels and referral mechanisms are available between the DSME service and other healthcare organizations.

S.8.1.c. Referrals are documented in each participant's record.

Standard

S.8.2. Ongoing self-management education and support are accessible to people with diabetes after the completion of initial DSME.

Indicators

S.8.2.a. The DSME service has a written policy describing the system in which ongoing education and DSMS are to be provided after completion of the DSME programme.

S.8.2.b. The DSME service has a list of available referral resources and community services that is updated annually.

S.8.2.c. People with diabetes are referred to community services and resources (such as diabetes associations and organizations, social services) as needed in order to obtain ongoing DSMS and other services.

S.8.2.d. A plan for follow-up DSMS is developed in collaboration with each participant.

Process standards

Community assessment

Standard

P.1. The DSME service develops based on an ongoing assessment of the needs of the population it serves.

Indicators

P.1.a. Initial and ongoing needs assessments are conducted and documented, recognizing the diversity and changing needs of the population.

P.1.b. The assessment process is appropriate to the needs of the population.

Individualized plan

Standard

P.2. Plans for individual diabetes education and diabetes education programmes are learner-centered and subject to ongoing review and modification.

Indicators

P.2.a. Assessment is a collaborative process that includes the person with diabetes, their family and/or supporters, and the other members of the multidisciplinary team.

P.2.b. The individual assessment encompasses diabetes knowledge, self-care ability and skills, cognition, lifestyle, level of literacy, support systems, barriers, quality of life, preferred language, preferred learning style, safety issues, cultural values (including religious beliefs and practices), behavioural goals and psychosocial status.

P.2.c. The person with diabetes and his or her supporters collaborate with the other members of the multidisciplinary team to develop the educational plan. This includes:

- a process that is culturally appropriate
- a clear and full explanation of the options and choices available to the person with diabetes to ensure informed choice

- the identification of the person's goals and desired outcomes
- acceptance of the person's choices by all members of the team.

P.2.d. The educational plan reflects the effective integration of:
- the individual assessment and identified goals
- current principles and practices of diabetes care
- the principles and practices of teaching and learning
- strategies for behaviour change
- lifestyle and health beliefs that impact on diabetes self-management
- physical, psychosocial, religious, cultural and socio-economic issues related to diabetes self-management
- processes for evaluating the outcomes and effectiveness of the plan.

P.2.e. The educational plan includes the identification of the resources needed to support living with diabetes.

P.2.f. The educational plan is reviewed with the person with diabetes and his or her supporters on an ongoing basis.

P.2.g. Processes and methods are in place to facilitate feedback between the person with diabetes and the other members of the team regarding progress towards the achievement of identified learning goals.

P.2.h. The educational plan recognizes the diversity of individual learning styles.

P.2.i. The educational plan includes age- and culturally appropriate educational resources.

P.2.j. The educational plan includes regular review times and accommodates changes in self-management over a lifetime with diabetes.

Implementation

Standard

P.3.1. The implementation of DSME is learner-centred and facilitates cognitive learning, behaviour change, healthy coping and self-management, and is extended to families, supporters, carers and communities where appropriate.

Indicators

P.3.1.a. The implementation of DSME is consistent with the plan developed in collaboration with the person with diabetes.

P.3.1.b. DSME is provided by a multidisciplinary team.

P.3.1.c. DSME is provided in a non-threatening and open manner.

P.3.1.d. Group DSME programmes are interactive.

P.3.1.e. Participants in group DSME programmes have the opportunity to discuss individually self-management issues and concerns with members of the DSME team.

P.3.1.f. A range of educational approaches and methodologies are used to meet individual needs.

Standard

P.3.2. DSME is evidence-based and provided in a professional and ethically sound manner.

Indicators

P.3.2.a. DSME is evidence-based and results in increases in knowledge and the application of knowledge by participants.

P.3.2.b. There is evidence that the results from current educational, behavioural and clinical research are used to improve DSME services.

P.3.2.c. The opportunity to participate in research is open to all team members.

P.3.2.d. Published research findings are regularly presented and discussed with team members.

P.3.2.e. Internationally recognized and validated tools are used to measure DSME and DSMS processes
and outcomes.

P.3.2.f. The provision of DSME is consistent with professional standards of practice, current knowledge and available evidence.

P.3.2.g. Educational, behavioural and clinical research is undertaken where possible to provide an evidence base for practice.

Access

Standard

P.4.1. DSME services will be recognized by and accessible to the local community.

Indicators

P.4.1.a. People affected by diabetes in the community know how to access DSME.

P.4.1.b. Once a request or referral for DSME has been received, there is a response within a reasonable time. The amount of time that is reasonable is predetermined based on priority and guidelines established by the DSME team and the advisory committee.

P.4.1.c. DSME is recognized as a basic component of diabetes care.

P.4.1.d. The implementation of DSME is appropriate for participants, and offered at an appropriate cost and at a time and venue that ensure easy access.

P.4.1.e. Any barriers to accessibility are reviewed and minimized on an ongoing basis by the advisory committee. These might involve cost, travel, the need for specific services, language, and/or the referral process.

Standard

P.4.2. The DSME service leadership and team members seek strategic alliances and partnerships with relevant community services in order to increase accessibility, and advance DSME and DSMS.

Indicators

P.4.2.a. Collaborative partnerships exist between the DSME service, community organizations and DSMS resources.

P.4.2.b. In order to support the achievement or maintenance of self-selected behaviours, the DSME service team members have up-to-date contact details and information on access to and the cost of local programmes (such as exercise and weight-loss programmes).

P.4.2.c. People's experiences in community programmes are assessed.

P.4.2.d. Community resources provide a source of referral for the DSME service.

P.4.2.e. Where appropriate and/or when requested by DMSE participants, personnel from community resources serve as guest speakers.

Standard

P.4.3. Follow-up and DSMS are accessible as needed and recommended as part of continuing education, behavioural goal-setting and action-planning, and/or reinforcement.

Indicators

P.4.3.a. Access to interventions and support services that may assist in addressing socio-economic, psychosocial and ongoing DSMS needs is arranged prior to completion of the DSME service programme.

P.4.3.b. DSME programme participants are informed about the importance of ongoing DSME and DSMS.

P.4.3.c. A written summary of current self-management, self-selected behavioural goals, future appointments and follow-up DSMS is provided to each participant prior to completion of the programme.

P.4.3.d. Periodic review and follow-up of self-management knowledge, skills and self-selected behavioural goals are provided by the DSME service.

P.4.3.e. A system is in place to remind participants when their periodic review is due.

Evaluation

Standard

P.5. The effectiveness and quality of the DSME service are assessed annually, linked to outcomes, and reviewed and revised on the basis of this assessment.

Indicators

P.5.a. The annual DSME service assessment will take into account:

- programme objectives
- curricula, methodologies and materials
- self-selected behavioural goal-setting and action-planning processes
- the participation of the multidisciplinary team
- participant access and follow-up
- resources (space, personnel, budget).

P.5.b. An established system of data collection is in place to facilitate the measurement and reporting of DSME service outcomes.

P.5.c. Satisfaction with the DSME service is assessed among participants and referral sources, and reviewed by the coordinator and the advisory committee as part of the evaluation process.

P.5.d. The assessment report is reviewed by the coordinator and the advisory committee, and action is taken where indicated.

Outcome standards

Knowledge

Standard

O.1. People with diabetes understand the effects of diabetes, treatment modalities, management of the behavioural, psychosocial and clinical aspects of diabetes, and the significance of maintaining a healthy lifestyle in order to reduce the risks for diabetes-related complications.

Indicators

O.1.a. Documentation exists for each participant, and includes:

- assessment
- educational plan
- intervention
- self-selected behavioural goals and action plans
- evaluation
- follow-up plans for DSMS
- any referrals.

O.1.b. The person with diabetes can describe:

- the components of treatment appropriate to his or her type of diabetes
- the relationship between elevated blood glucose, blood pressure and lipid levels, and the development of both the acute and the chronic complications of diabetes (such as heart disease or kidney disease)
- effective strategies for making behavioural changes
- the use of blood glucose monitoring for problem-solving and decision-making
- the common behavioural and psychosocial issues related to diabetes.

O.1.c. The person with diabetes can describe the interrelationship between blood glucose levels and nutrition, physical activity, stress and medication.

O.1.d. The person with diabetes can describe personally relevant:

- self-management practices
- blood glucose, blood pressure and blood lipid targets, and strategies to reach these medications

- strategies for behaviour change
- coping strategies
- self-selected behavioural goals and action plan.

Application of knowledge

Standard

O.2. People with diabetes and those at risk for diabetes make informed decisions and take deliberate action towards healthy living. These decisions occur in the context of their own values, socio-economic needs and resources, and desired quality of life.

Indicators

O.2.a. Attainment of self-selected behavioural goals is tracked and used as part of the annual process to assess the DSME service.

O.2.b. The person with diabetes makes lifestyle changes (such as stopping smoking, reducing intake of saturated and trans fats, taking medications, increasing physical activity, coping with stress) that reduce the risk of chronic complications.

O.2.c. The person with diabetes requests tests and procedures for the early identification of diabetes complications, and treatments to minimize their impact.

O.2.d. The person with diabetes demonstrates active problem-solving in his or her day-to-day living and self-management efforts.

O.2.e. The person with diabetes takes action to prevent, recognize and treat hypoglycaemia and hyperglycaemia.

O.2.f. Diabetes-related absences from school or work are minimized.

O.2.g. The person with diabetes reports or demonstrates the ability to attain self-selected behavioural goals that are individually relevant and meaningful, and consistent with his or her desired outcomes.

O.2.h. The person with diabetes demonstrates early help-seeking behaviour to reduce the need for hospital admission or visits to the emergency department.

O.2.i. The person with diabetes knows which resources, including DSMS services, are available and how these can be accessed.

O.2.j. Where necessary, a member of the DSME team will act as an advocate for the person with diabetes to help him or her to access care and DSMS services.

O.2.k. The person at risk for developing diabetes is able to describe lifestyle changes that may delay or prevent onset, as well as strategies to make those changes.

Clinical outcomes

Standard

O.3.1. The physical, psychological, and emotional health of the person with diabetes is improved.

Indicators

O.3.1.a. Regionally appropriate, evidence-based clinical targets are known by the healthcare team and people with diabetes.

O.3.1.b. Health outcomes are measured against goals determined by the person with diabetes and the healthcare team, such as:

- achieving self-selected behavioural goals
- clinical targets, including body mass index, waist circumference, serum lipid levels, blood glucose, HbA_{1C}, blood pressure, complication status
- growth and development in children and adolescents
- psychological status, coping, attitudes and quality of life
- macrovascular risk reduction (blood pressure, lipids, HbA_{1c}, weight control, decreased smoking, improved nutritional status, physical activity)
- microvascular risk reduction (HbA_{1c}, blood pressure control, smoking cessation, early identification and prompt treatment if necessary).

Standard

O.3.2. The person with diabetes collaborates with clinical care providers to define problems, set priorities, establish goals, create action and treatment plans, and solve problems.

Indicators

O.3.2.a. The person with diabetes or the person at risk for diabetes demonstrates active participation in DSME and DSMS.

O.3.2.b. Self-selected behavioural goals and action plans are part of the DSME record.

O.3.2.c. There is evidence that the participants took part in the development of the educational and
follow-up plan.

The community – primary prevention

Standard

O.4. Communities are aware of risk factors for diabetes and its potential complications and actions that may delay their onset.

Indicators

O.4.a. Information regarding factors contributing to diabetes and its complications is made available to the public.

O.4.b. People at risk for developing diabetes understand contributing factors and preventive actions.

O.4.c. People at risk for developing diabetes are able to access screening on a yearly basis.

O.4.d. Communities encourage healthy lifestyles by providing opportunities for physical activity, healthy food, smoking cessation and healthy living that are age- and culturally appropriate.

O.4.e. Education about healthy living and the prevention of obesity and diabetes is integrated into school curricula.

Community support

Standard

O.5. Communities are aware of the different types of diabetes and the needs of and support available for people living with diabetes.

Indicators

O.5.a. The DSME service assists the community in identifying strategies and promoting actions to alter social and environmental factors in order to facilitate healthy living for people with diabetes.

O.5.b. There is evidence of community support for DMSE and DSMS, such as:

- support groups/networks
- publicity about how and where to access DSME and DSMS
- resources or financial support for programmes and services for people with diabetes and those at risk for diabetes
- worksite wellness programmes
- school programmes
- diabetes camps.

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Glossary

Access – the means and opportunity to receive high-quality healthcare service without obstacles, such as financial, geographical, language- and literacy-related barriers

Accredited body – an organization that has successfully undergone an external evaluation to determine whether specific standards are being met in the delivery of services and operations

Administration – the process of efficiently organizing resources, including personnel, to ensure that the provision of healthcare is managed according to common goals and objectives

Advisory committee – a group that meets regularly to plan, review and advise regarding the development of the diabetes service and its programmes

Advocate – a person or entity that acts in order to garner support for a certain issue, interest, person or group

Alliance – an agreement between two or more people or services to cooperate to a significant degree to optimize solutions and opportunities

Clerical staff – a non-healthcare-professional member of the team who assists with operational functions, such as a receptionist or secretary

Cognitive learning – learning through thought and experience (including listening, watching, touching, reading) in order to process and remember information

Collaborative process – a process where people or organizations work together on one or more common goals; each individual or organization is dependent upon and accountable to the other

Community – a group of people who are defined by geographical area, culture, age or other common characteristics

Community leader – a member of the community who is chosen to represent the community and work for its best interest

Coordinator – a health professional who supports the functioning of the interdisciplinary team and develops and monitors the processes necessary to deliver diabetes education and care

Curriculum – a detailed plan for the educational programme which describes the overall aims of the course, the content (usually divided into topics/modules, each with its own set of objectives), the way participants are selected, details about the faculty and resources, references and texts, evaluation processes and, where appropriate, the process for allocating recognition of prior learning

Diabetes education service – an organization that provides a range of programmes which integrates clinical care, diabetes self-management education and diabetes self-management support to optimize outcomes for people with diabetes

Diabetes self-management – the actions and choices, employing a range of skills, knowledge and coping strategies, that are undertaken by people with diabetes in response to their condition.

Diabetes self-management education (DSME) – a process by which people with diabetes, their family and/or significant social contacts are engaged as active participants in the acquisition and application of the knowledge and practical, problem-solving and coping skills needed to achieve optimal health outcomes

Diabetes self-management support (DSMS) – the ongoing programmes and contacts that people with diabetes require in order to achieve their health goals, such as support groups, appointments with healthcare providers (face-to-face, telephone, or email contact), educational updates, physical activity or stress management programmes

Educator – a person who has received specialized training in DSME and DSMS, and provides DSME and DSMS to people with diabetes, their family and/or significant social contacts – may be a peer or a nurse, dietitian, psychologist, physician, pharmacist or other healthcare provider

Empowerment – help for people with diabetes to discover and develop their inherent capacity to take responsibility for their health

Equity – the equal distribution of evidenced-based culturally appropriate resources (health professionals, information and education) to people with diabetes

Evaluation – a process by which the success, impact, outcomes and/or satisfaction with a set programme are determined

Evidence – the results of scientific studies, such as randomized controlled trials, that have been produced from a sound study design and deemed to be clinically relevant

Healthcare team – the person with diabetes and the healthcare providers that support the management of his or her diabetes

Indicator – a measurable variable that provides information on whether the programme has achieved the desired outcomes

Institute – an established organization or body, such as a research or educational entity

Learner-centred – describes an activity, programme or lesson plan that is based on the assessed needs and goals of the individual learner, where the learner is in command of the learning experience

Learning and development plan – an individualized plan which includes the learning goals, objectives and planned activities that will meet the personal learning needs of the healthcare professional and advance his or her capacity to provide the skills needed by the diabetes service

Multidisciplinary team – a team consisting of professionals from different disciplines who, in partnership with the person with diabetes, plan and implement treatment, DSME and ongoing care to manage diabetes and related complications

Population needs assessment – a study in which data are collected in order to evaluate the needs of a defined population

Organization – a group of people who work together in a structured way for a shared purpose, such as a diabetes service

Outcome – a change that is achieved as a result of a programme or intervention

Partnership – the relationship between two or more persons or services that work in collaboration as co-owners of an initiative in order to achieve a common goal

Peer mentor – an experienced health professional who mentors a less-experienced health professional to learn professional skills, team dynamics, intercultural awareness and communication strategies

Periodic review – a planned diabetes assessment, completed at regular intervals, to identify the learning needs and update the learning plan for the person with diabetes in support of self-management towards optimal health outcomes

Primary care physician – a physician working at the primary care level, such as a family doctor, general practitioner, or physician working in the community

Process – a series of actions that are taken in order to achieve a predetermined result

Health professional practice – every action taken when in the role as a health professional and subject to scrutiny by the regulatory body of that health profession

Professional standards of practice – standards developed by professional bodies to guide and advise on accepted conduct of members of that profession

Research – the detailed study of a topic, especially in order to discover new information or reach a new or improved understanding of the topic

Specialist physician – a physician who has completed training in a specialty such as ophthalmology, endocrinology or nephropathy and has been recognized by a professional body for demonstrating pre-selected competencies in the area of specialization

Stakeholders – any person or group with an interest in the service, including people with diabetes, staff, community members, representatives of partner organizations or sponsors

Structure – the way in which parts of a programme or organization are arranged and interact with each other in order to achieve a defined result

Support person – an individual, identified by the person with diabetes, as having a positive influence on his or her ability to cope with and/or manage their condition

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