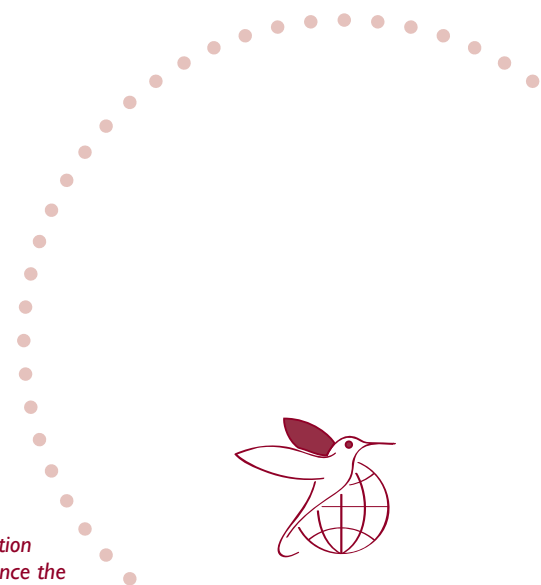


International Curriculum for Diabetes Health Professional Education



*The mission of the International Diabetes Federation
is to work with our member associations to enhance the
lives of people with diabetes.*



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Foreword

The lack of trained health professionals and lack of programmes to train health professionals have been cited by many member organizations of the International Diabetes Federation (IDF) as the most critical issue impeding the delivery of high-quality diabetes education and care. To address this, the IDF Consultative Section on Diabetes Education (DECS) sets as one of its major strategies for this triennium to write a curriculum that can be used by all members of the IDF. Contributions have come from all regions and thus reflect the global needs of the organization. The curriculum can be used in full to conduct comprehensive programmes or in part for short workshops. It can be readily adapted to meet the different and special needs of local health professionals, institutions and organizations. There is considerable emphasis placed on pathophysiology and clinical management of diabetes, as it is the philosophy of the DECS that to provide high-quality diabetes education, health professionals must have a sound clinical understanding. In this way, diabetes education delivered by well-trained health professionals becomes integrated with clinical care, forming the key to successful self-management of the person with diabetes. As we write this curriculum, new and innovative approaches to diabetes treatment are appearing. Thus, this document must be a living one that can evolve as new evidence becomes available. I sincerely hope that this curriculum is a step towards increasing health professionals' knowledge and understanding, thus resulting in better care for those living with diabetes.

Marg McGill, Chairperson, Editor-in-Chief

The number of people with diabetes worldwide continues to rise and rise. The majority of these have Type 2 diabetes, but Type 1 diabetes is also on the increase. Particularly worrying is the increase in Type 2 diabetes in young people. Management of diabetes in those affected continues to be problematic. In many parts of the world, treatment is rudimentary and many of the drugs used in treatment are unaffordable. A cornerstone of management, however, remains lifestyle modification. This is, again, very variable worldwide. The key is good knowledge on the part of those with diabetes and the ability to put that knowledge into practice. This requires education and a well-motivated, well-educated group of health professionals. For too long health professionals have assumed that they are skilled in the delivery of diabetes education and care, but equally often, due to ignorance, health professionals fall well short of the desired goals. A clear picture of what needs to be known is required. Many hundreds of curricula have been prepared; however, they commonly separate developing skills in education delivery and clinical management. We need to recognize that it is not one or the other. To deliver high-quality diabetes care, integration of both elements across all health professions is required. This curriculum will facilitate the training of health professionals from a variety of disciplines and at different levels, allowing them to provide the highest quality of diabetes education and care relevant to local needs and resources.

I commend it wholeheartedly.

Professor Sir George Alberti, IDF President

*“A curriculum is a document that describes the totality
of a learning experience and is designed
to achieve specific education goals”*

(Berg 1982)

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Introduction

In designing a curriculum, teaching and learning theories, creativity, fun and experiential learning should be incorporated. A comprehensive curriculum is fundamental to the education of a well-prepared and clinically effective diabetes educator. It is consistent with the International Diabetes Federation (IDF) Consultative Section on Diabetes Education's (DECS) concept of diabetes education and part of the vision of the IDF to empower people with diabetes and healthcare team members in an effort to improve prevention strategies and diabetes outcomes. In addition, a curriculum can serve as a mechanism to facilitate the delivery of global diabetes education standards, provide for consistent preparation of healthcare team members, and support the development of a dynamic discipline that has academic and clinical integrity.

Background

The need for consistent preparation of diabetes educators has been recognized by the DECS for a number of years. This has been supported anecdotally by many requests for assistance to develop education programmes and conduct education workshops for health professionals from many countries worldwide.

Therefore, an international curriculum will:

- Recognize a common framework for health professional education programmes.
- Support a common standard of practice based on the International Standards for Diabetes Education developed by the DECS in 1998 (Consultative Section on Diabetes Education, 1998).
- Use the Recognition Document as the broad framework for developing the curriculum (Consultative Section on Diabetes Education, 1999).
- Ensure quality diabetes education that allows built-in review processes, benchmarking and best practice to be identified and targeted.
- Be consistent with the role that diabetes educators are expected to perform.
- Prepare diabetes educators for an advanced level of practice.

The accreditation of education curricula prepared by the IDF DECS is part of the IDF recognition process for education programmes, whereby curricula are assessed against structure and process standards identified in the International Standards. This external review process complements the internal evaluation that is an integral part of any curriculum.

It is understood that many countries have well-planned, structured training programmes for diabetes educators. In most countries, however, administrators and providers are just beginning to recognize the integral part diabetes education plays in the management of diabetes, that every medical intervention is an educative process, and that specific education is required to enable health professionals to be effective diabetes educators. Within these areas, training programmes and curricula are necessary to prepare people for the diabetes educator role. Diabetes education is a specialty, and requires knowledge and competence at an advanced level if it is to be delivered effectively. Therefore, an international curriculum will assist government leaders/decision makers and healthcare providers to appreciate the complexities of the delivery of effective diabetes education and the specific knowledge, talents and role required of the diabetes educator as a specialist practitioner and effective member of the diabetes healthcare team.

The last decade has seen the role of the diabetes educator extend beyond the provision of education to include advanced clinical skills that encompass clinical assessment, complication assessment and management, medication adjustment and research. In some countries, the nurse practitioner role has emerged and developed. Nurse practitioners are highly skilled clinicians who have an extended scope of practice at an advanced level. These advanced practices include initiating medications, referral to specialists and ordering diagnostic investigations. Where these nurses exist, the curriculum must be designed to prepare them to work safely and effectively at the advanced level. Some advanced skills are included in this curriculum, indicated by an asterisk (*), others, such as prescribing medication, have not been addressed.

This document was developed to assist individuals and organizations to prepare education programmes for diabetes educators. It should be considered in the context of the legal, regulatory, professional and cultural requirements of individual countries. The curriculum framework outlined in this document is a guide only.

A curriculum

In developing a curriculum, it is important to:

- Involve key stakeholders;
- Suit the target audience;
- Ensure the content reflects current practice and, where possible, is evidence-based or at least consensus-based;
- Review the curriculum regularly to accommodate change;
- Link theory to practice.

Guiding principles

The curriculum will need to demonstrate that it:

- Supports students to gain knowledge, and develop skills and competence to deliver diabetes education;
- Has processes in place to recognize prior diabetes learning;
- Has processes for collaboration with relevant organizations, associations and other bodies where appropriate, for example, by providing clinical experience;
- Integrates theory, research* and clinical practice;
- Uses reflective practice, problem-solving and decision-making skills;
- Is standard-/competency-based;
- Has appropriate resources to deliver the curriculum, including the quantity and quality of clinical experience and supervision;

- Is delivered by a teacher and faculty with the appropriate education and qualifications to teach the subjects allocated to them;
- Has procedures in place to approve and monitor facilities where clinical experience is undertaken;
- Will lead to a qualification in diabetes education upon successful completion of the course;
- Equips the student to deal with professional issues, role conflict and the delivery of diabetes education according to the role they are expected to perform;
- Is clearly defined in the context of the particular society and healthcare system in which the programme is to be delivered.

**Research refers to the evaluation, utilization and implementation of research findings in practice, as well as undertaking and collaborating in the development of original research projects.*

Glossary of terms

Accreditation

Accreditation is also referred to as recognition. It is a process whereby the DECS examines a curriculum to ensure that it will prepare diabetes educators to function competently and safely in healthcare systems and services, thereby assuring students, consumers, healthcare providers and governments that the course is delivered at an appropriate standard and is recognized by the DECS. Accreditation is conferred on courses that meet the standard for a period of 3 years. After that time, re-accreditation must be sought.

NB: Accreditation refers to courses, not individuals.

Clinical experience

The course documentation must demonstrate how the student will acquire knowledge about diabetes and the clinical skills necessary to apply theory in the practical or clinical setting, and gain competence in the clinical field.

Clinical experience should take place under the guidance/supervision of an experienced diabetes educator working in an interdisciplinary diabetes care team.

Competence

Competence refers to the ability to perform procedures correctly and carry out the core components of the diabetes educator role. At the end of the course, students should not require supervision in their practice but will require support and mentoring.

Curriculum document

A detailed plan for the education programme that describes the overall aims of the course, the content (usually divided into topics/modules, each with its own set of objectives), how students are selected, details about the faculty and resources, reference/texts, evaluation processes and, where appropriate, the process for allocating recognition of prior learning. It also outlines information about the infrastructure of the organization offering the programme.

A curriculum document is not a detailed lesson plan. However, the lesson plan should be consistent with the curriculum document, contain specific details about the content, and be able to meet the stated goals, objectives and learning outcomes.

Diabetic

The word 'diabetic' should not be used as a noun; rather, refer to the 'person with diabetes'. 'Diabetic' can be used with reference to inanimate objects such as diabetic supplies.

Education provider

The person or organization delivering the education programme.

Faculty

The personnel who teach the curriculum.

Flexibility of course

The course should be flexible with respect to the content, access to the course and the delivery mode in order to facilitate study access to the course. It should be delivered at a level and standard appropriate for the country in which it is to be delivered.

Module

A specific section of the curriculum that contains details about the aims, objectives, learning outcomes and teaching strategies, length of time devoted to the module, any self-directed learning and evaluation processes about a single topic. A module can also be known as a unit or subject.

Re-accreditation

The process of reviewing curricula that have had major changes during the period of accreditation or renewing accreditation of the curriculum after the period of accreditation expires.

Recognition of prior learning

Prior learning refers to knowledge and competence already acquired before undertaking the diabetes educator programme. Each programme must demonstrate clearly how it will incorporate recognition of prior learning, where appropriate. Clear guidelines of how credit will be given for previous diabetes education experience and any appropriate units of study undertaken in other educational settings must be shown.

DECS curriculum framework

Purpose of the curriculum framework

While allowing for a variety of curricula approaches and support for innovation and change, the information contained in the international curriculum framework is intended to serve as a:

- Guide to education providers and faculty involved in developing courses for educating diabetes educators;
- Basis for assessing curricula submitted to the DECS for accreditation/re-accreditation;
- Vehicle for ensuring diabetes educators are prepared for the role they are expected to perform;
- Method of ensuring that a basic standard of diabetes education is met.

The criteria incorporate the major areas that need to be considered and included when preparing a curriculum. If desired, the proposed programme based on this curriculum could be reviewed by the DECS. Assessment of the curriculum will take approximately 3 months (Consultative Section on Diabetes Education, 1999). Education providers seeking DECS recognition need to ensure that sufficient time is allowed when submitting a curriculum to the DECS for consideration.

Organization and administration

- The curriculum should contain a statement of the philosophy and overall objectives of the course that are compatible with those of the IDF and the country and education provider in which the programme is to be conducted.
- There should be adequate human and material resources available to deliver the course that are commensurate with the financial resources of the organization.
- The curriculum should be administered by an experienced course co-ordinator.

Students

Students enrolled in the course should meet the normal requirements and selection process of the education provider and country concerned, and these should be described in the curriculum document. Students should have a health professional background.

Faculty and support staff

- A course co-ordinator should have overall responsibility for organizing and ensuring the smooth delivery of the course.
- Faculty members should be academically and professionally qualified in the areas they teach and have experience of working in an interdisciplinary diabetes team.
- There should be enough faculty members to:
 - teach the subjects in the curriculum;
 - provide adequate guidance, supervision and support for students, especially in the clinical areas where collaboration with experienced practitioners in the clinical area is important.

A curriculum vitae containing a list of the qualifications and experience of each faculty member should be included in the curriculum.

Preparation of the curriculum documentation

- (a) Successful completion of the course should lead to a qualification in diabetes education; however, recognized/styled for in the individual country concerned.
- (b) The curriculum should be based on a philosophy that takes into account the DECS International Consensus Standards for Diabetes Education, the competencies and relevant professional codes of conduct, ethical standards and educational requirements of the relevant professional associations, education providers and government of the country in which the

curriculum is to be delivered. The philosophy should be articulated clearly in the curriculum document.

- (c) There should be a rationale that clearly identifies the need to train diabetes educators and demonstrates that there has been consultation with key stakeholders and consumers. It should reflect the contemporary health issues and expectations of the country in which the curriculum is to be delivered.

The curriculum content

Any curriculum document designed to prepare diabetes educators should:

- Have a strong clinical and research focus (evidence-based care).
- Reflect the core components of the diabetes educator role:
 - clinical practice;
 - education, which includes prevention at every level and health promotion;
 - counselling and behavioural change techniques;
 - research and quality improvement/audit processes;
 - administration/management, which incorporates leadership.
- Include content that addresses professional preparation for the role:
 - how the diabetes educator, other health professionals and lay people work with each other, including responsibilities and professional boundaries;
 - working in an interdisciplinary team, which includes conflict resolution and negotiation.

Specific content

The specific content should be arranged into modules or subjects. Each module should contain:

- Goals, objectives and learning outcomes for the module;
- An outline of the content to be covered;
- Teaching strategies to be used;
- Assessment procedures and what constitutes a pass in the module;
- How much time is devoted to theory and how much to clinical practice/experience;
- Details of the proposed student workload for the overall course and for each module, ie how much time the student will spend in class, in the clinical situation, and doing homework and assignments;
- How theory and practice relate to each other;
- Assessment tools, including how clinical competence will be determined (copies of assessment tools should be provided as an appendix to the curriculum);
- Prescribed and reference books, journals and other materials recommended for each subject, which should be accessible to participants or supplied to them by the education provider.

Evaluation

Details about how the course will be evaluated, including evaluation by the students, teachers and clinical supervisors. Copies of these evaluation tools should be provided in an appendix. Arrangements for ongoing and periodic curriculum review should be described if the course is to be offered on an ongoing basis.

The education facility

The physical facilities in which the course is to be conducted should be adequate for the country and the needs of the students, and could include:

- Classrooms and conference rooms;
- Access to appropriate reference material and equipment, such as computers and those required for clinical and metabolic control and treatment;
- Teaching materials, including audio-visual equipment;
- Office accommodation for academic and support staff.

An outline of the physical facilities should be included in the curriculum document. It is acknowledged that facilities will vary between countries.

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