Review of Diabetes Structured Education

REPUBLIC OF IRELAND 2009
Report by:

Rita Forde
Advanced Nurse Practitioner and Chair of Diabetes Education and Empowerment Sub Group
Mater Misericordiae University Hospital
Dublin

Sean Dinneen
Consultant Endocrinologist/Senior Lecturer in Medicine
Galway University Hospitals/NUI Galway
Galway

Margaret Humphreys
Clinical Specialist Dietitian - Diabetes
Cork University Hospital
Cork

Maeve Carmody
Senior Community Dietitian
Health Promotion Department, HSE South
Eye, Ear and Throat Hospital
Cork

Anna Clarke
Health Promotion and Research Manager
Diabetes Federation of Ireland
Dublin

Kieran O'Leary
CEO
Diabetes Federation of Ireland
Dublin

James Conway
Assistant National Director
HSE
Palliative Care and Chronic Illness
Kildare
Foreword

The Diabetes Expert Advisory Group (EAG) recognised from the beginning the value of patient education in improving the self-care of each individual with diabetes.

Standard Number 3 in the EAG Standards of Care chapter sets the scene for this review...

*People with diabetes living in Ireland should be able to access diabetes care expertise and self-management education that is appropriate to their needs and in a location that is convenient and acceptable to them.*

The subcommittee consulted widely, held many meetings and in conjunction with the Diabetes Federation of Ireland, held their first workshop on patient empowerment/education involving all the stakeholders on 22nd April, 2009.

The aim of the workshop was to review best practice in this area and to make recommendations to improve both the availability and the standards of patient education programmes in Ireland. A national review of programmes followed and this document is the synthesis of this work. The recommendations are clear, practical and deserve implementation for the benefit of all people with diabetes in Ireland.

I would like to thank Rita and her sub-group and congratulate them on this valuable report.

**Dr. Colm Costigan**
Chair Diabetes Expert Advisory Group
Acknowledgements

The Diabetes Expert Advisory Group (DEAG) was established in 2006 and voluntary membership was sought from among the diabetes community. One of the many sub-groups to emerge from the EAG was Education and Empowerment. Subsequent to a national conference and workshop on Diabetes Education in 2009, a review of Structured Diabetes Education in the Republic of Ireland was conducted resulting in this document. The hard work, dedication and expertise of all of the members of this sub-group has paved the way for this detailed account of what Diabetes Structured Education programmes are available in the Republic of Ireland.

I would like to thank all the members of this sub-group, the Diabetes Federation of Ireland and the wider DEAG members, who gave so much of their time in the drive to improve diabetes clinical outcomes and empower people with diabetes with cost-effective clinical interventions.

Rita Forde
Advanced Nurse Practitioner
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Background

Diabetes Mellitus is one of the major chronic illnesses. The prevalence of Type 2 diabetes continues to increase rapidly, driven by the epidemic increase in the obesity levels of the Irish population. Type 2 diabetes affects 1 in 20 people in Ireland. Type 1 Diabetes is also increasing, though much more slowly. The costs of diabetes care make up a substantial portion of national health expenditure: from 5% to 15% depending on the location.

The Diabetes Expert Advisory Group (DEAG) was established in 2006 and voluntary membership was sought from among the diabetes community. The DEAG that first assembled in 2006 included people with diabetes, professional caregivers and managers who provide the resources for that care. One of the sub-groups to emerge from the EAG was Education and Empowerment. The First Report of the Diabetes Expert Advisory Group was launched in November 2008.

Subsequent to the launch of the Diabetes Expert Advisory Group’s First Report in November 2008 and the recommendations thereof, the Health Service Executive in conjunction with the Diabetes Federation of Ireland held their first National Conference and Workshop on Diabetes Education and Empowerment. The objective of the day was to present to health professionals and experts the available structured education programmes in the Republic of Ireland on both Type 1 and Type 2 diabetes. The programmes presented were CODE, DESMOND, X-PERT Ireland, BERGER, DAFNE, and BRUCIE. Ms Florence Browne, National Care Advisor, Diabetes UK Northern Ireland was invited as the keynote speaker for the day and participated in the afternoon workshops. The conference shared information on courses being delivered in Ireland. The workshops were arranged to facilitate a cross section of the disciplines in each group in order to reach a consensus on the criteria for structured education programmes in Ireland.

On the day, key criteria for structured diabetes education in Ireland were agreed by a multidisciplinary group of diabetes experts and HSE personnel. In addition, it was agreed that programmes should be integrated into standard diabetes care, be cost effective and flexible enough to meet the needs of every group while still maintaining structure and content.

Following on from the above, it was agreed by the DEAG Education and Empowerment sub-group to carry out a review of structured patient education in the Republic of Ireland. This report is the outcome of that work.
Definition of Diabetes Structured Education

Structured diabetes patient education as defined by the Education and Empowerment sub-group is:

“a planned and graded process that facilitates the knowledge, skills and ability for diabetes self-management and empowers individuals to live healthily, to maintain and improve their quality of life and assume an active role in their diabetes care team.”
Benefits of Diabetes Structured Education

The expected benefits of structured diabetes education from a patient standpoint are:

- Increased application by the individual of knowledge/understanding of diabetes.
- Self-empowerment with the person effectively and confidently participating in their own diabetes self-management.
- Psychological adjustment to living with diabetes.
- Improved undertaking of diabetes self-management behaviours.
- Improved clinical outcomes.
Key Criteria

The following are the key criteria pertaining to diabetes structured patient education agreed at the National Conference and Workshop:

- **Philosophy** – each programme is underpinned by an explicit patient-centred philosophy which will guide the learning theories to be utilised and hence the delivery of programmes.

- **Curriculum** – the written document based on a needs assessment establishes the components covered in each session so that all professionals know what is covered in the programme. It makes explicit the aims and objectives of the programme through detailed lesson plans, including a description of learner and educator activities.

- **Trained educators** – the educator needs to be an effective information-processor, be familiar with learning theories and have facilitation skills to assist the participants to problem solve and set personal goals. The educator will need to have diabetes expertise at a defined level such as an academic diabetes qualification or equivalent.

- **Quality Assurance** – review is necessary to ensure the programme is delivered as outlined in the curriculum and within the stated philosophy. Initially, this may be internal (self, peer reflection) however ultimately this should be by external reviewers and include participant feedback.

- **Audit** – evaluation of the programme is based on the stated outcomes of the programme and should include data on biomedical parameters, quality of life people with diabetes experience and the degree of self-management achieved as a result of attendance at the programme.
Standards

First Report of the Diabetes Expert Advisory Group includes two Standards (Standards 2 and 3) relating to structured patient education and/or empowerment:

STANDARD 2

*People with diabetes living in Ireland should...*

...receive care that is person-centred and encourages self-management. They should be enabled to participate in clinical decision making, care planning and service planning to the extent that they are confident and comfortable with doing this.

STANDARD 3

*People with diabetes living in Ireland should...*

...be able to access diabetes care expertise and self-management education that is appropriate to their needs and in a location that is convenient and acceptable to them.

The Standards for Structured Patient Education are based on Standard 3 above, and emerged from the National Conference and Workshop and were subsequently agreed by the Sub Group:

*People with diabetes living in Ireland should be able to access high quality diabetes education appropriate to their needs in a location that is convenient and acceptable to them...*

Standard 1

...that is underpinned by a philosophy which will guide the learning theories to be utilised and the delivery of diabetes education. The philosophy underpins the education goals and objectives which are reflected in the outcome, determines the delivery process and forms the basis for the quality assurance process.

Standard 2

...that is documented and communicated to all members of the diabetes care team. The diabetes educational intervention is based on needs assessment of the total client population and individualised to deliver patient-centred education.

Standard 3

...that is delivered by a trained educator with training in learning theories appropriate to the target population of people with diabetes population, facilitating skills which include motivational interviewing, problem solving, goal setting and an approved level of diabetes self-management knowledge.

Standard 4

...that is of the highest quality and regularly reviewed to identify opportunities for improvement based on proven advances in educational strategies and psychological interventions.

Standard 5

...that is evaluated within defined timelines incorporating selected indicators that reflect the knowledge, psychosocial determinants of diabetes self-management and diabetes self-management behaviours. Due to the difficulty of assessing the impact of education on clinical outcomes and cost effectiveness, these should be cross linked and reported on nationally (National Diabetes Services Scheme 2007)¹.

Diabetes Structured Education Programmes available in Ireland

The following section outlines the programmes presented at the national conference and workshop in April 2009. A description of each programme is given including information on the course content and how it is delivered. The programmes are:

**Type 1**
- Berger
- DAFNE

**Type 2**
- CODE
- Desmond
- X-PERT Ireland

**Paediatric**
- BRUCIE
Type 1 Diabetes Structured Education Programmes

Berger
The Berger Programme is a comprehensive diabetes self care skills course, named after Professor Michael Berger, the eminent Endocrinologist who recognised the value of teaching people how to adjust insulin to match their daily food intake. This programme is designed for people with Type 1 diabetes. People attending this course learn how to adjust their insulin dose depending on their food choice. The course also focuses on enhancing diabetes self management skills.

HOW TO GET STARTED

Contact details
Berger Training is organised by Mary Frances Williams, Diabetes Development Manager
Email: mary-frances.williams@roche.com Mobile: 086 0482605

"I have learned more about my diabetes in the last 2 and a half days than I did in the last 8 years. Everyone with diabetes should have this opportunity.
Participant Feedback"

How to become an educator
To become involved with the delivery of Berger each Diabetes Nurse and Dietitian must attend a Berger training programme. In addition each educator must attend a Berger Structured Education Programme being delivered by a centre. The Diabetes Development Manager for Berger will review all materials with the educators, facilitate an education session specifically in relation to the programme and the materials used. Only healthcare professionals (nurses and dietitians) actively involved in care provision in specialist diabetes services are eligible to become Berger educators.

How to deliver a programme
• The programme curriculum is delivered utilising adult learning techniques and recognising the processes involved in behaviour modification. All aspects of diabetes self-management and care are incorporated in the curriculum. A knowledge questionnaire is completed by each participant at the outset and again at completion of each course.

• The programme is delivered over three days with organised meal breaks, which promotes participant cohesion and enhances the learning environment.

• All of the relevant patient information and the educators packs are provided free of charge to the participating centre. Food models and flip charts are used in conjunction with patient workbooks and supporting literature. Review of case studies and problem solving are integral to enhancing patient participation and learning.
OTHER CONSIDERATIONS

Administration time
The administration time involves inviting participants, inputting data, arranging the follow-up session and engaging with the quality assurance process. Approximately 2 hours.

Educator support
All educators involved in the delivery of this programme are invited to attend an annual meeting. This is to provide support and guidance to the educators and provide feedback and updates on the programme. These meetings are specifically for those involved in the delivery of the Berger course.

Day One
- Knowledge questionnaire
- What is diabetes: Monitoring glycaemic control, hypoglycaemia insulin and dose adjustment
- Carbohydrate counting

Day Two
- Individual blood glucose discussions
- Interactive carbohydrate counting session
- Diabetes ketoacidosis
- Interactive dose adjustment sessions
- Healthy eating and weight control

Day Three
- Individual blood glucose discussion
- Eating out and alcohol
- Physical activity
- Diabetes review and pregnancy
- Knowledge questionnaire
- Open discussion

“"If I had diabetes this is the type of education I would want to receive. The course is practical, comprehensive, well structured, accessible and inclusive. I have found it very rewarding to deliver. Client participation and satisfaction is excellent.

Berger Educator"

Three months following each course all participants are invited back for a review in their original group. This is generally led by the participants and facilitated by the Diabetes Nurse and Dietitian.
DAFNE - Dose Adjustment For Normal Eating

DAFNE is a structured education course delivered in a five day intensive skills based education programme to people with Type 1 Diabetes. In this course, people learn how to adjust their insulin dosage to suit their free choice of food, rather than having to work their life around their insulin doses. DAFNE aims to encourage and equip people who have Type 1 diabetes to manage their insulin regimens actively and independently.

HOW TO GET STARTED

Contact details

DAFNE training is organised centrally in the UK, contact:
Central DAFNE Administration Gillian Thompson, National Director
Tel: 0044 (0) 191 293 4115  Email: gillian.thompson@northumbria-healthcare.nhs.uk

For information on DAFNE in the Republic of Ireland contact:
Mary O’Scannail, Diabetes Nurse Specialist
Tel: 01 211 5040  Email: ddc@hse.ie

First steps in becoming a DAFNE centre

1. Identify at least one Diabetes Nurse and one Dietitian to train as DAFNE educators.
2. Identify one Physician to train as a DAFNE doctor.
3. Secure the funding to set up and operate as a DAFNE centre and to cover the costs of training for the DAFNE educators and doctor. An application form must be completed (containing details for Diabetes Nurse, Dietitian and the Physician) and returned to DAFNE Central with the appropriate fee (http://www.dafne.uk.com/downloads/CentreApplicationForm.pdf).

How to deliver a programme

The programme is delivered Monday to Friday from approximately 09:00–16:30 by A Diabetes Nurse and/or Dietitian. The programme is comprehensive and is delivered in a suitable meeting room within the hospital.

The DAFNE Educator Programme (DEP)

The DEP is delivered by experienced DAFNE educators. There is a curriculum for the DEP along with specific training resources. All DEP trainees receive a comprehensive training information file prior to commencing training. This file clearly sets out what the learning objectives are, teaching resources provided and expectations for participants. The DEP is a six step course as below:

• Step 1 – Orientation (1 hour)
• Step 2 – Background reading (3-5 hours)
• Step 3 – Observe a DAFNE course (5-days)
• Step 4 – Attend a preparatory workshop (2-days)
• Step 5 – Deliver a week’s peer supported DAFNE course (5-days)
• Step 6 – Follow-up Workshop and DAFNE Collaborative (1-day)

All six parts of the DEP must be successfully completed in sequence, in order for DAFNE educator registration to be obtained. In order to retain DAFNE educator status, educators must deliver at least 1 DAFNE course every 6 months.
The DAFNE Doctor Programme (DDP)
The DDP is a four part course. The general aim is that the doctor is able to provide the management and clinical support that enables a diabetes service to:

- Train in DAFNE principles.
- Incorporate DAFNE into routine service delivery (including crucial administrative support).
- Conduct a Quality Assurance programme.
- Decide how best to contribute to the DAFNE Collaborative.

The DDP has the following components:

- Completion of the DEP from Step 1 to Step 3 with some minor amendments:
  - Step 1 – no need to agree a learning contract.
  - Step 2 – no need to read text on educational methods.
  - Step 3 – no need to report on a case study.
- Attend a 1-day workshop.

OTHER CONSIDERATIONS

Administration time
Estimated at approximately 2-3 hours per course (8 patients).

Educator support
Educator support is available through DAFNE Central and also through local Educator Networks. A lead educator is identified in each centre to communicate closely with DAFNE Central and other DAFNE centres at all times throughout the year. Educators are encouraged to get involved in peer-reviewing other centres and the ongoing internal quality assurance of the programme in their own centre. DAFNE Central organises an annual Collaborative meeting to bring together all educators, doctors and researchers involved in the wider DAFNE group. Ongoing quality assurance provides feedback and continued quality development and training to educators. Resource materials and literature are reviewed and updated on the three year cycle.
Type 2 Diabetes Structured Education Programmes

CODE - Community Orientated Diabetes Education
CODE is delivered to people with Type 2 diabetes attending primary care centres by the Federation’s healthcare professional staff or practice nurses with a recognised diabetes qualification who have been trained as CODE Educators. CODE is fully supported by the Diabetes Federation of Ireland and the HSE.

CODE supports people with diabetes either newly diagnosed or living with diabetes through group learning. It encourages participants to become confident in their diabetes self care management and aims to improve quality of life through informed decision making. The sessions are based on an empowering philosophy, have a stated curriculum, are quality assured and evaluated at local and national level. CODE is a programme designed for and validated on an Irish population with a view to it being part of the proposed integrated diabetes care model. It is in a position to respond to changing needs in Ireland’s diabetes population.

HOW TO GET STARTED
Contact details
For further information log onto www.diabetes.ie or to request the programme for your patients contact:
Dr Anna Clarke, Health Promotion and Research Manager, Diabetes Federation of Ireland
Tel: 01 8363022 Email: anna.clarke@diabetes.ie

“CODE was a great help as I have learnt and understand more about my Diabetes. I am more aware now and I have learnt how to read food labels correctly.”
Participant Feedback

How to become an educator
Training occurs in 2 stages. Stage 1 covers facilitation, motivation, problem solving and behaviour change training. Stage 2 covers the CODE programme content. Participants must agree to deliver 3 CODE programmes to their patients within 2 years of training. The first programme will be supported by a trained educator while the third programme will form part of the peer review process. Each educator must attend a mandatory annual development day every 2 years.

How to deliver a programme
The CODE manual contains the necessary props plus a full outline for each session. The CODE programme of 4 sessions, each 2 hours in duration, is delivered over an initial 3 weeks and a 6 month follow up session. Participants also receive a telephone support call at 10 weeks. Each programme is open to 16 individuals. This brings a real element of long-term involvement and commitment to participants that behaviour change is a long-term process. Participants automatically receive free membership of the Diabetes Federation of Ireland ensuring they get a personal invitation to attend ongoing public education meetings in their locality and receive a quarterly copy of “Diabetes Ireland” in order to maintain ongoing support and access to new and updated information.
**What is covered**

CODE contains the diabetes education topics as defined in international best practice but its flexible approach permits the sessions to be tailored to meet the needs of each group.

**Week 1**: Pre-programme screening; diabetes explained; risk factors; signs and symptoms; and cardiovascular link to diabetes.

**Week 2**: Healthy eating; physical activity; lifestyle changes and personal goal setting.

**Week 3**: Importance of regular follow up; complications; self-management and optimal diabetes control.

**Week 10**: Follow-up phone call to review personal goals.

**Week 26 follow up**: Post course screening and review of achievements and goal setting. Diabetes education and support continues post the programme delivery through ongoing receipt of personal invitations to local diabetes education and diabetes information updates.

**OTHER CONSIDERATIONS**

**Administration time**

To organise CODE, the practice invites sixteen people to attend on 4 specific dates. A reminder call is necessary before week 26.

**Educator support**

The Federation’s Regional Professional Development Team supports the person delivering the programme initially through co-facilitation of first post training programme and then ongoing professional diabetes support.
DESMOND - Diabetes Education and Self Management for Ongoing and Newly Diagnosed
The DESMOND programme has a theoretical basis and clearly stated philosophy based on patient empowerment. The curriculum includes time for patients to “tell their story”, information about diabetes and how it is optimally managed, the potential risks of diabetes, self-monitoring, diet, exercise, stress and emotional issues. At the end of the course people are encouraged to develop a personal action plan. DESMOND supports people in identifying their own health risks and responding to them by setting their own specific behavioural goals. DESMOND supports behaviour changes through changes in people’s health beliefs. DESMOND is delivered as 6 hours of education by 2 trained Educators. People who attend the course are encouraged to bring a member of their family with them.

HOW TO GET STARTED

Contact details
DESMOND training programmes are organised by:
Desmond Central Office, Leicester, UK
Tel: 0116 258 7757 Fax: 0116 258 6165 Email: desmondweb@uhl-tr.nhs.uk
Information is available on the DESMOND website at: www.desmond-project.org.uk

For further information on DESMOND in the Republic of Ireland contact:
Ciara Heverin; Tel: 00353 91 548335 Email: ciara.heverin@hse.ie

“An excellent programme where patients learn about diabetes through problem solving, questioning and discussions in a group setting. The food modules are practical and patients are enthusiastic to be involved.”

DESMOND Educator

How to become an educator
Training is provided to registered health care professionals in a 2 day residential course in groups of up to 15. Here educators explore the theoretical and philosophical basis of DESMOND as well as having the opportunity to practice the skills involved in delivery and facilitation. Ongoing quality assurance and accreditation involves delivering at least 5 programmes per annum, reflection, external review and quality development.

How to deliver a programme
A programme is delivered in groups of up to 10 people with diabetes and guests. Two trained educators deliver it in two three hour sessions or one six hour session. Programmes available include:
- DESMOND Newly Diagnosed.
- DESMOND Foundation (for those with established diabetes).

At the time of going to press two further programmes are being piloted:
- DESMOND ‘walking away’ (for those with IGT & IFG).
- DESMOND Ongoing – A refresher course.
What is covered

**Session 1:** Getting the Big Picture; introductions and housekeeping; patient story (understanding and expectations); professional story (diabetes and glucose); monitoring diabetes (how and when); Taking Control 1 – Food Choices – glycaemia and insulin resistance; reflection and questions.

**Session 2:** Professional story (risk factors and complications); physical activity; Taking Control 2 – Food Choices – Focus on Fats and Cardiovascular disease; diabetes self management plan; patients concerns; what happens next.

**OTHER CONSIDERATIONS**

By offering the DESMOND Foundation course to people who have had diabetes for a number of years it can really help the person with diabetes maximise their self management skills. Most centres offer a mixture of newly diagnosed courses and Foundation courses to meet all needs.

**Administration time**

Administration support for organising local venues is encouraged which can be organised centrally to cover an entire HSE area.

**Educator support**

DESMOND has sought to be explicit in terms of its philosophy, the educator behaviours and processes that it requires of its educators to deliver the programme. The Quality Development (QD) Framework has been designed to support the change and the use of the word ‘development’ instead of ‘assurance’ recognises the need for ongoing support to enable educators to review their beliefs about their work with people with diabetes and be able to personally review and reflect on their actual performance. Educators are supported by Central office, study days and the Desmond network.

"Taking part in the DESMOND programme has helped me to make changes to my lifestyle. It was an excellent course with really good information. I now take notice of food labels particularly for sugars and saturated fat."

*Participant Feedback*
X-PERT Ireland

The X-PERT Ireland (Patient Education versus Routine Treatment) programme, is a specially designed dietetic structured patient education programme which meets the criteria as listed in this document. It provides people with the confidence, knowledge and skills necessary to self manage their diabetes. It is a Health Service Executive (HSE) programme for all adults with Type 2 Diabetes either newly diagnosed or with established diabetes.

X-PERT has been shown to improve people’s diabetes control and knowledge, increase the skills needed to look after diabetes and improve health. People with Type 2 Diabetes are invited to attend 6 x 2.5 hour group education sessions. Usually the average person with diabetes receives approximately 1.5 hours of dietetic support per year whilst with X-PERT Ireland the person with diabetes receives approximately 16 hours of dietetic support over the course of the programme.

HOW TO GET STARTED

Contact details
Information on the X-PERT programme and training is available on www.xperthealth.org.uk/localcenter_living.php. In addition, your local community nutrition and dietetic service may be contacted for further information on X-PERT in the Republic of Ireland.

How to become an educator
All those delivering X-PERT Ireland to people with diabetes are known as X-PERT Ireland educators and must attend a 3 day ‘Train the Educator’ course before delivering the programme. All educators must meet identified minimum competencies before training and all educators must sign and adhere to best practice guidelines for the implementation of X-PERT Ireland.

How to deliver a programme
Participants with Type 2 Diabetes (and a family member, carer or friend) are invited to attend 6 X 2.5 hour sessions. The X-PERT Ireland programme also includes a group refresher session at three months and at six months and an annual group session thereafter, in order to provide ongoing support, a crucial aspect of the management of chronic conditions. It is recommended that 15-18 people with Type 2 Diabetes be registered onto each course, which, including family and friends who chose to attend, will result in a group size of between 20-24 people.

The X-PERT Ireland manual contains all the necessary information required to deliver the programme and it provides a full outline for each session. Each educator receives a copy of this manual upon completion of the X-PERT Ireland educator training. Furthermore, visual props are required in order to run the programme, these are also available upon completion of the educator training.

For the first time in my life I feel like I am the one in control of my diabetes... The group session was delivered so well that there was much more to be gained than from an individual session.

Participant Feedback
What is covered

**Week 1:** What is Diabetes? Identification of symptoms of diabetes and how these may be alleviated by lifestyle changes and if necessary medication. Demonstration of what health results mean such as HbA1c, blood pressure, blood cholesterol levels, BMI and waist circumference.

**Week 2:** Weight Management – Healthy Eating and Physical Activity.

**Week 3:** Carbohydrate Awareness and Meal Planning.

**Week 4:** Supermarket Tour/Reading food labels.

**Week 5:** Possible Complications of Diabetes.

**Week 6:** Overview, questions and evaluation.

The final 20-30 minutes of each session is allocated to goal setting. The ‘lifestyle experiment’ is intended to provide skills training to support people in making informed decisions regarding their own health results and diabetes self care.

Each participant gets their own handbook and a copy of their ‘diabetes health profile’ which they use to learn about and monitor their own progress.

**OTHER CONSIDERATIONS**

**Administration time**
- Organisation of a suitable local venue, ideally a HSE facility, otherwise costs may be incurred.
- Recruitment of participants may take various forms e.g. review of current waiting list, liaison with GPs, referrals from members of Primary Care Team or Network and local advertising.
- Organisation of resources for the programme.

**Educator support**
Those who run the Train the Educator Training are known as X-PERT Ireland Trainers. These Dietitians are responsible for supporting ongoing development, supporting the educators and for the preparation and running of Train the Educator courses. There are 2-3 X-PERT Ireland trainers in each HSE area whose role is to: support ongoing development; support the educators; and to prepare and run Train the Educator courses.

Further support is available on [www.xperthealth.org.uk/home.html](http://www.xperthealth.org.uk/home.html) or from your local Community Nutrition and Dietetic Service.
Paediatric Patient Education Programme

**BRUCIE - Better Regulation Using Carbohydrate and Insulin Education**

BRUCIE is an education programme aimed at providing adolescents over 12 years with diabetes the skills to understand the relationship between food, blood results and insulin dose adjustments. The workshop is based on developing practical skills and involves gaining a greater understanding of the effect of diet on their blood glucose levels. Education sessions on carbohydrate counting are also provided for parents of adolescents who attend BRUCIE. A joint session with adolescents and parents is provided at the yearly follow up. BRUCIE is delivered by the diabetes Dietitian and the Advanced Nurse Practitioner in diabetes.

**HOW TO GET STARTED**

**Contact details**

If you are interested in more information please contact:
Ciara Heverin, Community Diabetes Dietitian, West City Centre, Seamus Quirke Road, Galway
Tel: 091 548463   Email: ciara.heverin@hse.ie

or

Helen Burke, Advanced Nurse Practitioner in Diabetes, University Hospital Galway
Tel: 091 524411

In common with most involved in diabetes care, we are disappointed with the metabolic control obtained in our adolescent patients with diabetes, and concerned about the long term implications of this poor control. The BRUCIE education programme was initiated to provide adolescents with diabetes with the skills to understand how foods affect their blood sugar levels and to relate this knowledge to their glycaemic control. To date, feedback has been overwhelmingly positive especially from a quality of life perspective and learning in a group environment, with some children achieving significant reductions in HbA1c, and all reporting enhanced knowledge and self-confidence.

Professor, National University of Ireland, Galway

**How to become an educator**

There is no current training programme for healthcare professionals available in Ireland.

**How to deliver a programme**

6-8 people are invited to attend BRUCIE, based on the following inclusion criteria:

- Adolescents must be over 12yrs.
- People with diabetes must be on Multiple Injection Therapy.
- HbA1c <12%.
- No known eating disorders.
I am 13 years of age and have diabetes since I was 5. I attended the BRUCIE day in UCHG some time ago. I really enjoyed the day. It was good to meet other people my age with diabetes. Before that day I was always worried when I had biscuits or sweets but now I know that if I eat them occasionally with my main meals I can calculate the insulin much easier. The handouts were great, especially the pictures of the food and portions. The whole day was fun and Helen and Ciara were really nice. Since then my HbA1c has gone from always being around 9.6 to 8.2 which is great and I hardly ever go low now.

Participant Feedback

What is covered

- Dietary Workshop is based on developing practical skills and involves gaining a greater understanding of the effect of diet on their blood glucose levels. The dietary education involves food games using food models, food labelling, scenarios, eating out and snack choices.

- Education by the Diabetes Nurse involves discussion on:
  - Insulin ratios and insulin dose adjustment;
  - Hypoglycaemia;
  - Sick day rules;
  - Alcohol;
  - Exercise;
  - Management of diabetes in the school setting.

- Follow up sessions are provided at 3 and 6 months and yearly in the same group.

- An education session on carbohydrate counting is also provided for parents of adolescents who attend BRUCIE.

- A joint session with adolescents and parents is provided at the yearly follow up.

OTHER CONSIDERATIONS

Administration time

This includes the recruitment of participants; organisation of dates and a suitable venue; organisation of follow up sessions.

Educator support

At this time as there are only 2 people running BRUCIE and such a support network has yet to be established.
Mapping of Diabetes Structured Education

- See Appendix 1 for Dublin and Cork City extracts
- A Regional Audit of Structured Diabetes Education was carried out in N.I. by Florence Browne.

For information go to www.diabetes.org.uk
## Costings

<table>
<thead>
<tr>
<th></th>
<th>CODE</th>
<th>DESMOND</th>
<th>X-PERT Ireland</th>
<th>BERGER</th>
<th>DAFNE</th>
<th>BRUCIE</th>
</tr>
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<tbody>
<tr>
<td><strong>Initial education of trainers</strong></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Facilitation skills training</td>
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<td>Facilitation skills training N/A</td>
<td>Facilitation skills training incorporated in the programme training</td>
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<td>Programme training</td>
<td>10 participants £3,800.00</td>
<td>Programme training £1,700.00 per educator spread over 3 years</td>
<td>Programme training £35.00 approx. printing of curriculum</td>
<td>Programme training Free to participating centres</td>
<td>Programme training €1,161.39 per team, €2,904.95 for nurse and dietitian and €256.44 for doctor</td>
<td>Programme training N/A</td>
</tr>
<tr>
<td><strong>License fee per person</strong></td>
<td>Annual</td>
<td>2009 - 2012 £1,400.00</td>
<td>2008 - 2011 £32,123.00</td>
<td>Annual</td>
<td>Nil</td>
<td>Annual</td>
</tr>
<tr>
<td>N/A</td>
<td>£420.00</td>
<td>£498.00</td>
<td>£1,104.00</td>
<td>£1,451.00</td>
<td>£2,335.00</td>
<td>£554.00</td>
</tr>
<tr>
<td><strong>Course delivery direct costs</strong></td>
<td>£330.00</td>
<td>£98.00</td>
<td>£480.00</td>
<td>£80.00</td>
<td>£80.00</td>
<td>£30.00</td>
</tr>
<tr>
<td><strong>Administration time</strong></td>
<td>£950.00</td>
<td>N/A</td>
<td>Nil</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Audit (analysis and manpower)</strong></td>
<td>Quality Assurance</td>
<td>Cost of undertaking QA</td>
<td>£105.00</td>
<td>Included in the training costs</td>
<td>£830.00</td>
<td>Nil</td>
</tr>
<tr>
<td>Professional ongoing development of educators</td>
<td>£105.00</td>
<td>Included in the training costs</td>
<td>N/A</td>
<td>Annual meeting</td>
<td>N/A</td>
<td>Currently under developed</td>
</tr>
<tr>
<td>Materials (initial prep)</td>
<td>£30.00</td>
<td>£750.00</td>
<td>£3,600.00 (can be shared – one off payment)</td>
<td>N/A</td>
<td>£1,033.33</td>
<td>£800.00</td>
</tr>
<tr>
<td>Literature per participant</td>
<td>£8.00</td>
<td>£4.00</td>
<td>£5.00</td>
<td>Free</td>
<td>£3.21</td>
<td>£450.00</td>
</tr>
<tr>
<td>Miscellaneous per programme</td>
<td>N/A (travel costs if applicable)</td>
<td>N/A (travel costs if applicable)</td>
<td>N/A (travel costs if applicable)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Venue costs</td>
<td>Primary Care Centres or rental hire if applicable</td>
<td>N/A</td>
<td>HSE facility, or rental hire if applicable</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Post programme data input</td>
<td>£80.00</td>
<td>£90.00</td>
<td>£32.00</td>
<td>£90.00</td>
<td>£90.00</td>
<td>£60.00</td>
</tr>
<tr>
<td><strong>Average number of participants per programme</strong></td>
<td>12 – 14 plus carers if applicable</td>
<td>10</td>
<td>15 – 18 participants plus family member or carer if applicable</td>
<td>6 – 8</td>
<td>7</td>
<td>6 – 8</td>
</tr>
</tbody>
</table>

Costs are approximate
Nil = Costs incorporated in the training programme
Recommendations

1. The National Clinical Lead for Diabetes should provide national leadership and strategic direction for diabetes structured patient education programmes.

2. Diabetes Structured Patient Education should be a core component of the diabetes care pathway for all people with diabetes.

3. Diabetes structured patient education should be available to all people with diabetes at diagnosis and at regular intervals thereafter.

4. People with diabetes should be made aware of the different programmes available in their area so that they can access the most appropriate programme for them.

5. Annual national audit should be conducted with a view to ascertaining the number of people with diabetes who have availed of structured patient education.

6. Key audit data should be utilised to establish that the core criteria as outlined in the Standards are being met; funding costs identified; that provision of structured patient education is value for money and quality assured.

7. It is recommended that there is dedicated funding for provision of structured patient education.
Appendix 1