

Diabetes education in primary care: “Target sessions”

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There is increasing evidence that the onset of type 2 diabetes can be prevented or delayed. The active involvement of people with diabetes, inclusive of family and carers, in the provision of their own care is a key element of good diabetes care. This article describes the implementation of “diabetes target education sessions” in South East Essex.

All people with diabetes require education regarding careful self-management and maintaining optimal health. Research has demonstrated that people with diabetes who have never received diabetes education had a four-fold increased risk of developing major complications (Nicolucci et al, 1996). NICE (2003) recommends that structured education should be made available to all people with diabetes at diagnosis, and should then be available as required on an ongoing basis.

Education is a central part of treatment. People with diabetes can be educated through reinforcement and repetition until integration into daily routines begins to occur. Therefore, a staged process of education assists in building knowledge and skills. Education can have a profound effect on glycaemic control, as well as improving quality of life and treatment satisfaction at a fraction of the cost of prescription treatment and repeated follow-up appointments (Clinical Governance Support Team, 2004). Improving HbA_{1c} by just 1 percentage point can significantly reduce the risk of complications (Stratton et al, 2000).

Diabetes education

The manner in which education is best delivered can be the subject of much debate. Education needs to reflect individual needs, be patient-centred and adaptable. It should also take into account available resources and opportunities. This means a variety of education options need to be available for people with diabetes. This may include several elements, such as one-to-one sessions, group sessions, use of multimedia, accessibility, culturally sensitive information and geographically convenient venues, to name but a few.

The person with diabetes and his or her carers and family will require immediate and straightforward explanations of the diagnosis and an ongoing educational programme to provide more details when he or she needs them or is ready for them. However, the Department of Health (DH) and Diabetes UK identified a lack of adequate provision for structured education in several areas, including ongoing support, carers, and hard-to-reach groups (DH and Diabetes UK, 2005).

A key element of an effective care programme is that it does not rely on individual clinicians

Article points

1. Investing in education does not necessarily mean an additional expense for the healthcare commissioning bodies.
2. Diabetes education needs to be friendly, accessible, flexible and life-long.
3. “Target sessions” provide ongoing knowledge and skills to improve self-management and to motivate people to be more active in decision-making and self-management.
4. People with diabetes require immediate and straightforward education at diagnosis and an ongoing programme to suit their needs.

Key words

- Ongoing diabetes education
- Target sessions

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Page points

1. Interventions based on ideas of informed choice and acquiring the skills of self-management, including group work, the addition of audiovisual aids and behavioural and social learning approaches, have been shown to be more effective than didactic approaches.
2. To enable people with diabetes to manage their condition successfully they may need a combination of medical treatment, information, advice, respect, psychological support and understanding.
3. Diabetes target sessions are education sessions dedicated to a specific diabetes topic and are additional to the structured education sessions provided by DAFNE (Dose Adjustment For Normal Eating) and STEP (Structured Type 2 Education Programme).

or educators to remember to deliver a service, but instead creates an environment that supports and reinforces self-management and collaborative care (Glasgow et al, 2001). Importantly, interventions based on ideas of informed choice and acquiring the skills of self-management, including group work, the addition of audiovisual aids and behavioural and social learning approaches, have been shown to be more effective than didactic approaches (Padgett et al, 1988; Brown, 1990; Griffin et al, 1998; Roter et al, 1998).

There are no consistent relationships between gender, education, income, intelligence, general knowledge about health and illness or personality type, with adherence to medical regimens (Glasgow, 1991; 1999; Griffin et al, 1998). The achievement of good outcomes for people with diabetes is dependent on the provision of well organised and coordinated diabetes services. Qualitative studies suggest that people with diabetes value autonomy and equality during clinical encounters (Hornsten et al, 2005).

To enable people with diabetes to manage their condition successfully they may need a combination of medical treatment, information, advice, respect, psychological support and understanding. Diabetes management accompanied by motivation and personalisation contributes to successful self-management.

Structured diabetes education in south-east Essex

Primary care is widely perceived to be the core of an efficient, equitable and effective place to deliver diabetes services, with the Government making it clear that much of diabetes can be managed in this setting (DH, 2006).

South East Essex PCT provides a diabetes assessment and treatment service for south-east Essex. There are four diabetes specialist nurses (DSNs) employed, who are based in primary care for the delivery of diabetes services.

The primary care DSNs offer structured patient education regularly for people with type 1 and type 2 diabetes, as recommended by NICE (2003) and the National Service Framework for diabetes (DH, 2001). This

includes DAFNE (Dose Adjustment For Normal Eating) and STEP (Structured Type 2 Education Programme).

DAFNE is a skilled-based structured education programme for intensive insulin therapy for people with type 1 diabetes. The DAFNE course is taught in groups of eight over a consecutive 5-day period, totalling 35 hours.

STEP is based on 6 hours of structured group education for people with type 2 diabetes. The STEP course is taught in groups of 15–20 and is delivered over the course of 1 day. STEP incorporates a curriculum broadly covering topics such as: what is diabetes?; managing diabetes; monitoring diabetes; diabetes and illness; living with diabetes; food choices; screening; test results and annual reviews; physical activity; emotions and self-management. Both education programmes are held during the week and within working hours of 9am–5pm.

Diabetes target sessions

Programmes such as STEP and DAFNE are hugely valuable, successful and life-changing in many ways for people with diabetes. However, not all people with diabetes are able to attend these education programmes, due to a variety of reasons, such as family care commitments or employment arrangements. Identifying this gap in service provision and the need for alternative types of education to meet individual requirements led to the development of "diabetes target sessions" in primary care.

Diabetes target sessions are education sessions dedicated to a specific diabetes topic, and are additional to the structured education sessions provided by STEP and DAFNE. The aim of target sessions is to provide ongoing knowledge and skills to improve self-management and motivate people to become more active in decision-making and to take more responsibility for managing their diabetes. Family members, partners and carers are all encouraged to be involved.

The overall goal of the diabetes target sessions is to assist the people with diabetes, and their carers, family or both, to accept and integrate diabetes management into their lifestyle, to

achieve and maintain optimum glycaemic control and improve quality of life.

Diabetes target sessions are part of the primary care DSN's role and are offered as educational updates, revision or reinforcement.

Diabetes target session model

The diabetes target sessions are open to anyone without prior appointment, contributing to improved access and choice. Education sessions are held bi-monthly and are carried out at South East Essex PCT clinics, which are located on a bus route, with good parking facilities. Due to the geographical spread within South East Essex PCT, the same diabetes target session is held twice, but in different areas. Target sessions are scheduled for 2 hours, although this is flexible depending on the group's requirements – on occasion sessions have continued for up to 3 hours. Flexibility of this type helps to foster partnership working with people with diabetes.

Target sessions have a planned educational curriculum. The curriculum development process incorporates the following:

- A curriculum and lesson plan developed by the DSN delivering the session.
- Acknowledgement of people's perceptions, priorities and goals.
- Educational material is provided in appropriate and multimedia formats to allow people to assimilate information.
- Evaluation of the activity by participants, such as knowledge, self-care skills, accessibility and overall satisfaction.
- Assessment of ongoing educational needs.

The continued updating of information, acquisition of new knowledge, including changes in technology and management practices applicable to self-care, are core elements involved in the diabetes target sessions. Diabetes education needs to be friendly, accessible, flexible and life-long, covering various topics.

Diabetes target session topics are selected by asking individuals what they would like to learn more about. Evaluations from each session, needs assessments and feedback from other education sessions, such as STEP and DAFNE, also provide rich information on what people would like to learn more about (*Box 1*).

The DSN functions as a facilitator, encouraging two-way communication via a mixture of interactive discussions, activities and lectures designed to encourage development of knowledge and skills. In discussion and partnership with individuals, options for follow-up may include attending future diabetes target sessions, attending the STEP or DAFNE programmes, one-to-one appointments or regular telephone contact for health coaching.

Diabetes target sessions: Feedback and evaluation

Evaluation of the sessions has been extremely encouraging and this continues to be assessed. Evaluation is undertaken via a session questionnaire, assessing patient satisfaction, with a space for patient suggestions, producing qualitative data.

Adult learners are likely to want to learn whatever will help them cope with their present circumstances and evolving social skills. Receiving subject-specific information that is meaningful for the person with diabetes facilitates this. Feedback identifying diet, nutrition and the management of hypoglycaemia have been highlighted as areas people wish to learn more about.

The diabetes target session feedback received so far suggests that local people with diabetes would like much more education delivered in this way. Feedback pertaining to the structure and delivery of the diabetes target sessions supports the requirement for people to have an alternative option adjunct to nationally recommended structured education programmes, such as DAFNE (DH and Diabetes UK, 2005; *Box 2*). *Box 3* provides a summary of the benefits of the diabetes target sessions.

Funding

In terms of infrastructure, including facilities, information management and telephone follow-up, the diabetes target sessions are supported by the PCT, at no extra cost to the service. Target sessions have been incorporated into the established primary care DSN's role, by using current resources in a different way, for example group education. This is both cost-

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Box 1. Target sessions identified from patient feedback.

- How diabetes can be controlled
- Monitoring of glucose levels
- Diet and nutrition
- Insulin and tablets
- Hypoglycaemia
- Hyperglycaemia
- Illness
- Foot care
- Eye care
- Exercise
- Driving and travel

Box 2. Feedback taken from the session evaluations.

- “No fixed appointment necessary makes it easier for me to attend or not depending on what else is going on that day.”
- “Is a good opportunity to meet other people with diabetes.”
- “I liked the informal environment.”
- “It was so easy to get to.”
- “I saw it advertised in the paper, what a good idea.”
- “The venue was convenient.”
- “I found it very interesting.”
- “The diabetes nurse was friendly and supportive.”
- “I liked having the opportunity to discuss concerns with a diabetes nurse.”
- “It has generated renewed interest for me in learning about diabetes and how I can help myself.”
- “I know how to treat a hypo the right way now.”
- “When is the next diabetes target session?”
- “The length of the session was just right.”
- “I learned a lot.”
- “I will come to future sessions.”

Box 3. A summary of the benefits of the diabetes target sessions.

- Provides choice.
- Provides peer support.
- Provides an alternative option to the structured education programmes STEP and DAFNE.
- Provides practical application of skills and knowledge.
- Enables people with diabetes to gain support, independence, confidence and understanding in the day-to-day management of diabetes.
- Promotes health by advising on illness, diet, physical activity, psychological support, travel and holidays to name but a few.
- Encourages self-care, independence, health, self-confidence and illness management.
- No extra funding is required.
- Involves friends, families and carers.

effective and has benefits, including patients having a shared learning experience and feeling less isolated (NICE, 2003).

Educational materials to aid with delivery of the target sessions are those already available within the primary care diabetes service. For

example, food models and hypoglycaemic event treatment demonstration packs. Therefore, no extra cost has been incurred by purchasing educational materials.

Costs in relation to photocopying and printing of the diabetes target session flyers did not amount to a significant spend. The PCT diabetes service stationery budget was able to absorb this cost without significant impact. Flyers were distributed by PCT internal mail and electronic mail, keeping costs neutral. This has meant extra funding has not been necessary for implementing the diabetes target sessions.

Advertising

Diabetes target sessions have been advertised using an A4 flyer, which was designed to be eye-catching, with use of colour and pictures.

Several routes for advertising have been used. These include advertising in the local press, via the PCT’s communications department at no extra cost, in the PCT newsletter and in the local PCT health clinics, local libraries and general practices. The significance of word of mouth advertising – which is the most effective method – should not be forgotten.

Attendance

Target sessions have been well attended, particularly those related to diet and management of hypoglycaemia. The numbers vary between 8 and 10 people.

Group education can contribute to bolstering self-confidence. The diabetes target sessions encourage informal conversations and sharing of experiences, concerns and emotions associated with diabetes. A supportive environment and positive attitude assist people in pursuing any changes that may be required, and promote a sense of internal self-control, which is fundamental to maintaining good health.

Individual target sessions may have a different audience each time, depending on which topic the person has decided is of interest to him or her. It does not necessarily follow that the same people attend each session. Diabetes target sessions cover individual topics, encouraging and empowering people to choose which subject they are interested in and

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would like to learn more about. This example of choice helps people with diabetes to decide on what is important to them in improving the management of their diabetes.

Discussion

The South East Essex PCT diabetes assessment and treatment service has developed diabetes target sessions to cater for people with type 1 and type 2 diabetes, taking into account geographical issues, disability and educational needs. Enabling people to learn, develop and enquire in a relaxed environment supported by a healthcare professional and other people with diabetes. The target sessions are informed by national guidance and evidence-based practice (DH, 2001; NICE 2003; DH and Diabetes UK, 2005; National Collaborating Centre for Chronic Conditions, 2008).

Investing in education does not necessarily mean an additional expense for the healthcare commissioning bodies. Instead, early investment to prevent deterioration should actually reduce treatment costs at a later stage. For example, it has been estimated that the cost of 6 hours of education for a person with diabetes is roughly the same as 2 weeks of treatment with a glitazone. So if glitazone treatment was delayed for 1 month, the whole education programme could be funded through this change alone (Management of Diabetes for Excellence Group, 2007). In view of this, investment in education becomes not only affordable, but essential. NICE recommends that structured education is best offered in groups, which is both cost-effective and has other benefits as people share the learning experience and feel less isolated (NICE, 2003).

Conclusions

Early indications are that the diabetes target sessions are a preferred way for people to receive ongoing education and information. Future considerations include:

- Sessions being delivered on Saturdays and in the evenings, for those people who are unable to attend during the day due to employment arrangements or family commitments.

- Engaging speakers from different specialties, such as podiatry, general practice, psychology and dietetics.

- Reaching out to minority groups by working with local leaders within these groups.

Evidence suggests that focused education may have some effect in maintaining or improving glycaemic control (NICE, 2003), but there remains little evidence of impact on other biomedical clinical outcomes, partly because of short studies. Qualitative data support the benefits of education as far as patient satisfaction, knowledge gained and improved quality of life (NICE, 2003).

Further evaluation in clinical trials and qualitative studies is recommended to guide future research efforts towards identifying effective strategies for integrating diabetes self-management strategies into healthcare settings. ■

- Brown SA (1990) A meta-analysis revisited. *Patient Education and Counseling* 16: 189–215
- Clinical Governance Support Team (2004) *Factsheet No. 8: Structured Education and Support For People With Diabetes*. Available at: <http://tinyurl.com/dyzaqp> (accessed 27.05.09)
- Department of Health (2001) *National Service Framework for Diabetes Standards*. DH, London
- Department of Health and Diabetes UK (2005) *Structured Patient Education in Diabetes, Report from the Patient Education Working Group*. DH, London
- Department of Health (2006) *Our Health, Our Care, Our Say: A New Direction for Community Services*. DH, London
- Glasgow RE (1991) Compliance to diabetes regimens: Conceptualization, complexity and determinants. In: Cramer JA, Spiker B (eds). *Patient Compliance in Medical Practice and Clinical Trials*. Raven Press, New York
- Glasgow RE, Fisher EB, Anderson BJ et al (1999) *Diabetes Care* 22: 832–43
- Glasgow RE, Hiss RG, Anderson RM et al (2001) *Diabetes Care* 24: 124–30
- Griffin S, Kinmouth AL, Skinner C et al (1998) *Educational and Psychosocial Interventions for Adults with Diabetes: Report to the British Diabetic Association*. British Diabetic Association, London
- Hornsten A, Lundman B, Selstam EK et al (2005) *J Adv Nurs* 51: 609–17
- Management of Diabetes for Excellence Group (2007) *Diabetes: Finding Excellence? Facing the Multi-faceted Challenge of Diabetes*. Available at: <http://tinyurl.com/re9pxp> (accessed 27.05.09)
- NICE (2003) *Guidance on the Use of Patient Education Models for Diabetes. Technology Appraisal 60*. NICE, London
- National Collaborating Centre for Chronic Conditions (NCCCC; 2008) *Type 2 Diabetes: The Management of Type 2 Diabetes (Update)*. NICE, London
- Nicolucci A, Cavaliere D, Scorpiglione N et al (1996) *Diabetes Care* 19: 927–33
- Padgett D, Mumford E, Hynes M et al (1988) *J Clin Epidemiol* 41: 1007–30
- Roter DL, Hall JA, Merisca R et al (1998) *Medical Care* 36: 1138–61
- Stratton I, Adler AI, Neil HA et al (2000) *BMJ* 321: 405–12
- Tuomilehto J, Lindström J, Eriksson JG et al (2001). *N Engl J Med* 344: 1343–50