Evolution of locally-based diabetes education for healthcare workers

Jan Watson

ARTICLE POINTS

1 Existing education courses did not always integrate areas of learning, such as knowledge, skills, competencies and understanding of diabetes.

2 Educational requirements were met through local programmes, together with the development of English National Board 928 (Short Course in Diabetes Care) at Bournemouth University.

3 In West and North Dorset, local programme provision consists of a series of study sessions provided over a year.

4 Various national diabetes care initiatives such as the NSF have precipitated continual change in educational provision.

5 Education should be creative, dynamic and integrated to meet the needs of participants.

KEY WORDS
- **Competencies**
- **Multi-disciplinary education**
- **Knowledge**

Jan Watson is a Lecturer Practitioner in Diabetes at Dorset County Hospital and Bournemouth University

Introduction

Healthcare professionals working in the field of diabetes need to be offered education that allows the development of appropriate knowledge, skills and competencies. Over the past nine years, the diabetes care team for West and North Dorset has been proactive in the development of educational programmes which allow both primary and secondary care staff to achieve this in several ways. This article discusses the evolution of formal, accredited learning developed at Bournemouth University in conjunction with colleagues from other diabetes teams across Dorset, and the development of a flexible learning programme in West and North Dorset to meet the needs of those not wishing to participate in an academically-led programme.

Recent developments in diabetes care have focused attention on the need for health professionals to develop appropriate knowledge and skills for care delivery within both primary and secondary care settings (Audit Commission, 2000; Department of Health, 2003). In response to such documents, and indeed to the new General Medical Services contractual arrangements, many nurses have found themselves taking on new roles and responsibilities within their field of practice. Further, diabetes nurse specialists are developing new ways of working, often involving greater autonomy not only in clinical decision making but in the psychosocial support of their client group.

The diabetes teams across Dorset have long been proactive in offering educational updates to those involved in diabetes care. This article describes how the team based at Dorset County Hospital and serving West and North Dorset has sought to meet the changing needs of healthcare professionals over the past nine years and discusses how the challenges of current diabetes care can now best be met.

The area

West and North Dorset is a rural area with a diabetes population of about 5000. If these numbers appear small in comparison to some urban areas, the logistics of providing the service offers its own challenges. Secondary care clinics take place not only at the diabetes centre in Dorset County Hospital, but also in three other community hospital locations. The diabetes centre itself is not readily accessible to much of the client group, and this precludes the ability to offer certain services to patients. For example, group education is offered to those with newly diagnosed type 2 diabetes, but since these are also delivered in four locations, it comprises just one afternoon session. The role of primary care in the education and support of people with diabetes has therefore long been recognised in this area.

Nurse education

In the mid-1990s, one- to two-day update courses were offered, predominantly to hospital and district nurses (a Dorset-wide practice nurse course, run by specialist nurses, was already in place). The perceived need to offer comprehensive information in a relatively short time meant that the sessions were largely didactic in nature and the content determined by the diabetes team involved in the teaching. This neither recognised the variations in learning styles of the participants (Honey and Mumford, 1986), nor the need to integrate areas of learning such as knowledge, understanding, skills, attitudes and behaviour (Rogers, 1996).

In 1997, a working group consisting of a nurse specialist, practice nurses and a dietitian considered the skills and competencies required by practice nurses in order to participate in diabetes care (Burrows et al, 1997). The group determined three levels, ranging from assisting a general practitioner with care, becoming more proactive in the management and annual review of patients, through to taking a major role in assessment, education and ongoing support (see *Table 1*). In order to meet the knowledge and skills requirement, appropriate educational opportunities needed to be made available. The needs of the first two levels were being reasonably met. The practice nurse course moved into the university setting, however, and in conjunction with this the Dorset diabetes nursing teams, with Bournemouth University, developed an ENB 928 (English National Board Short Course in Diabetes Care) course offering 40 Level 2 (Diploma) academic points. This effectively fulfiled the needs of those wishing to practice at the higher level of competency.

At this point, it was decided to look more closely at the provision for West and North Dorset. The following issues needed to be addressed:

- the knowledge, skills and competencies required by both primary and secondary care teams
- the need to offer multi-disciplinary education
- the ability of staff to attend courses
- evaluation and assessment
- the inclusion of those working in other sectors, e.g. nursing and residential homes, prison service, private hospitals, healthcare assistants and workers, and members of the ambulance service, among others.

Content

The content of education was drawn not only from perceived competencies and skills needs, but also from evaluation of previous study days. The content was broken down into smaller component parts so that a 'rolling' programme was offered over the course of a year. In the first year each session was allocated a day or part day, according to teaching design and the included material. The sessions offered in 1999 are shown in *Table 2*.

Participants were able to attend as many of the sessions as they required. This recognises the need to be able to determine one's own learning needs and objectives, and access the resources required to meet them. The literature relating to the course recommended attendance at the initial overview day for those who had not had the opportunity to study or practice in diabetes care for a while.

Delivery

More sessions meant smaller groups! Many could be accommodated in user-friendly rooms in the hospital education centre, rather than in the lecture theatre. This allowed the team to introduce more variety in learning methods, such as break-out groups, use of problem solving through case studies, workshops and practical demonstrations, e.g. foot examination. Members of the diabetes team were actively involved in the teaching, with some outside speakers including people with diabetes. Most speakers provided lecture notes and were requested, where

PAGE POINTS

1 The Dorset diabetes nursing teams collaborated with Bournemouth University to devise an EBN 928 course.

2 An alternative in West and North Dorset provided a 'rolling' programme, enabling participants to attend as many sessions as required.

3 Course content was drawn from competency and skill requirements, and evaluation from previous educational study days.

4 More sessions enabled smaller groups and more diverse learning methods.

Table 1. Example of role/skills recommendations (Burrows et al, unpublished)

Competency Level 1 – minimum role of practice nurses	
Aim:	To screen patients prior to GP consultation, both at initial and follow-up visits
Clinical responsibilities:	Practical skills: ability to measure height, weight, body mass index,urinalysis, visual acuity, etc Referral to dietitian, chiropody, etc Data recording
Recommendations for education:	Self-directed learning – revision of anatomy and physiology Visits to diabetic clinic – at least 2 sessions (primary or secondary care) Training to test visual acuity (at clinics) Reading – patient leaflets, booklets Attendance at one general diabetes study day plus annual update

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1 Members of the diabetes team were actively involved in teaching.

2 Evaluated was in terms of content, teaching, perception of personal learning, and anticipated care delivery changes.

3 There was no accreditation or formal assessment but documentation designed to be part of a portfolio of learning was provided and could be useful for access to more formal courses.

4 Extra courses were organised to fill gaps identified in delivery.

5 Due to the dynamics of diabetes care education needs to be flexible to meet participant and patient requirements.

appropriate, to direct participants to further reading.

Evaluation

Each session was evaluated in terms of content, teaching, perception of personal learning, and anticipated changes to care delivery.

This approach allowed the team to make changes year-on-year, and also to determine whether the perceived needs of the participants were being met.

Assessment

The course was not accredited and there was no formal assessment. However, recognition of attendance and the learning that was taking place was important. The documentation given to participants was designed to be used as part of a portfolio of learning and therefore contained:

- stated objectives of the day
- space to define own personal learning objectives
- space to describe whether and how objectives were met, and identify further learning needs
- space to reflect on how the content could be integrated into practice.

Participants had the option to build a portfolio of care that could include further reflection on episodes in practice and development of knowledge. This was considered vital for post-registration portfolio (PREP) purposes and could constitute a useful document as evidence of personal learning for access to more formal courses.

Table 2. Dorset County Hospital Diabetes Team 1999 Teaching Programme

Course title	Session
Introducton to diabetes	Whole day
Healthy eating for diabetes	Afternoon
Acute disturbance of control	Afternoon
Diabetes and surgery	Afternoon
Diabetes education for patient and carer	Afternoon
Foot care and wound healing	Afternoon
Annual clinical and education review	Afternoon
Caring for children with diabetes	Morning
Women's issues	Afternoon

Critical evaluation and change

Participants

During the first year of delivery, the course attracted an average of 40 participants at each session. The participants were mainly nurses from primary and secondary care trusts. Community chiropodists and dietitians attended some sessions, but the aim of offering a multi-disciplinary programme was not achieved. There were very few participants from the private sector or from medical teams.

In response to 'gaps' in delivery, extra whole-day general courses were organised for nursing and residential care home staff (including cooks and managers) and for healthcare assistants. The latter has become established as a well-subscribed annual event. Diabetes care is also taught on NVQ courses offered by the secondary care trust.

It is also worth noting that the team runs an annual primary care day, which attracts both medical and nursing staff.

Content

Evaluation suggested that, in general, participants' objectives were being met. However, the team felt that too little time had been given to psychosocial aspects of care and a separate 'whole-day' course was established to meet this need.

The need to change

Education needs to be dynamic to meet the needs of the client group. Various elements have precipitated change:

- the requirement to base content and curriculum on delivery of the *National Service Framework for Diabetes*
- the rapid development of care delivered by primary care teams and the changing role of practice and community nurses
- assessment of the need for more targeted educational intervention for hospital care teams (identified through a nurse-led project and through patient focus groups)
- the logistic difficulty in releasing staff to attend study sessions
- the availability of members of the

diabetes team for teaching purposes within the context of an ever-increasing caseload

- the development of the university-based ENB diabetes course to a higher (degree) level as part of a generic BSc (Hons) Health Studies or a BSc (Hons) Health Studies (Diabetes) pathway.

Through dialogue with the local implementation team for diabetes, provision of education for primary care has been largely 'detached' from that which is to be offered to secondary care. This allows the stated multi-disciplinary needs of primary care to be met directly. The provision will also be offered to prison service medical teams as part of their development towards integration into primary care trusts, and to local military camp medical teams.

The approach in the hospital setting will undergo a fundamental change. Delivery strategies such as short 'buzz' teaching sessions, and the use of IT systems as a teaching and learning tool will allow staff to become more self-directed, either as individuals or ward/departmental teams.

For all groups, the use of experienced care providers as 'facilitators', and the use of the diabetes team and its clinics as a learning resource, will be continued and developed.

Figure 1 illustrates the process which has underpinned changes made to the educational programmes offered.

Discussion

Concern for the development of appropriate educational frameworks for healthcare professionals has featured in the diabetes press over recent years, including the need for a national course for diabetes nurse specialists. Certainly such a course might go some way towards rationalising the level of knowledge, understanding and skills required by those practising at this level. It may also contribute towards the removal of anomalies in recognition of the responsibilities of the role (Education Development Group, 2001).

Llahana et al (2003) note the wide range of courses undertaken by those practising diabetes nursing care – from non-accredited short courses through to masters degrees. It is not possible now, when advertising for a specialist nurse, to require an ENB 928 as a prerequisite for application, and there are certainly difficulties in describing what we mean by 'specialist' care. For example, a nurse practitioner educated to degree level would have highly developed clinical and interpersonal skills within a framework of critical thinking and analysis. He or she would be proficient in applying appropriate research in practice. Would this person be less able to adapt these skills to the delivery of high quality individualised diabetes care than a person who had undertaken a 'national' course in diabetes specialist nursing? Undertaking higher education in healthcare subjects may well provide more widely skilled practitioners as well as offering a greater choice of higher education access, as Watkinson (2000) asserts.

The Department of Health is challenging traditional care delivery models through initiatives such as the Changing Workforce Programme (www.modern.nhs.uk). Roles and responsibilities are likely to be defined more by the competencies and skills required to deliver the care. A competency framework for diabetes, such as that developed in Scotland (Scott and Gillies, 2003), could underpin a number of ways of learning. This framework could range from local study days to web-based courses; from formal 'taught' courses to reflective portfolios of practice. This recognises the diverse nature of adult learning and allows practitioners to achieve the level of competency required within their role at their own pace, and within the work place.

Many nurses will not wish to undertake formal education and training at a higher level in order to deliver diabetes care. This does not mean that they are not able to develop the knowledge and skills to practice effectively. It could be argued that the development of 'national' courses delivered in specific institutions might limit the diversity of learning that could otherwise contribute to quality care.

PAGE POINTS

1 Multi-disciplinary needs of primary care have been met by separating primary and secondary care team education.

2 The hospital setting approach will change, with short teaching sessions and use of IT systems to allow more self-directed learning.

3 A diabetes competency framework could underpin learning and range from local study days to web-based courses.

4 The Dorset diabetes team has tried to recognise the varying needs among practitioners and meet them in flexible and diverse ways.

The Dorset county diabetes team has attempted to adopt a philosophy that recognises varying needs among practitioners and is seeking to meet them in flexible and diverse ways. We are seeing outcomes in the quality of care that is being achieved across both primary and secondary sectors.

Those of us who work in both practice and education need to continue to be open to new opportunities and to think creatively about the development of new ways of teaching and learning for diabetes care. ■

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For details of diabetes courses offered at Bournemouth University, please contact the author Jan Watson: jwatson@bournemouth.ac.uk

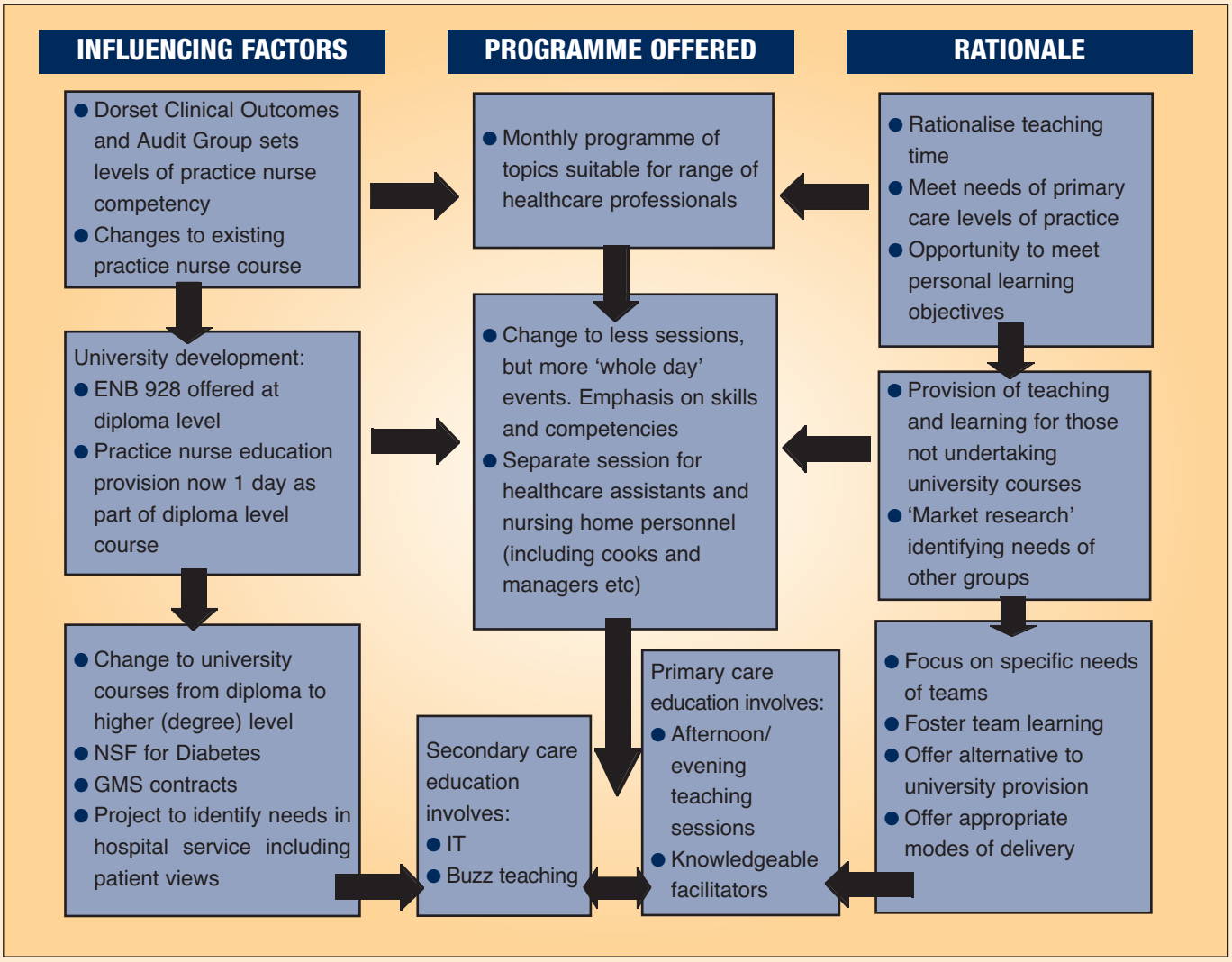

Figure 1. The process underpinning the evolution of diabetes education in West and North Dorset.