# Is diabetes specialism in the community the way forward?

A C Felix Burden

#### **ARTICLE POINTS**

Models of specialist care in the community have existed since the 1950s and include outreach clinics and miniclinics.

2 A first class diabetes service needs the initial education of the primary care team, continuing diabetes education and professional development, mentorship and appraisal, provision of clinical services and new techniques for support.

3 Problems encountered by the specialist diabetes team include lack of resources in terms of education, IT and time.

Practical issues regarding clinical areas should be considered when establishing the diabetes specialist team.

5 The threat exists that PCTs may dismiss chronic disease as not worthy of investment.

#### **KEY WORDS**

- Specialist care
- Community
- Education
- Resources

Dr AC Felix Burden is a Reader in Clinical Medicine and Consultant Community Diabetologist at the University of Leicester.

### Introduction

My definition of the specialised team is a group of independent clinicians who are equal and all spend the majority of their time studying and treating clinical diabetes. To be an effective team they also need to meet to reflect on their work together. This definition excludes the generalist. The idea that diabetes specialists can work in the community is increasing in popularity, but the team will face problems. This article attempts to address the reasons for establishing such a team and document some of the problems they face.

arly studies suggested that attendance at hospital specialist clinics was important in reducing complications of diabetes and mortality (Hayes and Harries, 1984). Later research showed that unstructured care in the community is associated with poorer follow-up, worse glycaemic control, and greater mortality than hospital care. Organised care, using a computerised recall system with electronic tagging and prompts for patients and their family doctors, can achieve care as good as or better than hospital outpatient care. (Griffin, 1998).

Primary care is in a pivotal position to provide organised care, particularly with its ability to ensure that the defaulter receives the components of their annual review. Electronic systems help with this. The organisation of care is particularly important because people who default are at an increased risk of complications. It should also reduce duplication of clinical effort (i.e. when patients attend different hospital clinics in the same week for their diabetes).

This pivotal role of primary care is now so accepted that the Medical Research Council has recommended that no further research comparing primary and secondary care should be undertaken. Since the early 1980s it has been evident that secondary care could not adequately manage all people with diabetes (Burden and Jones, 1982).

# Historical aspects of diabetes specialism in the community

Various models of specialist care in the community started to evolve in the 1950s. The first were outreach clinics. These were largely hospital clinics held in a setting that was more geographically convenient for the person with diabetes. I ran several such clinics for many years, and they certainly reduced patient costs. There were no other major benefits, such as education of the primary care team. It became impossible to simultaneously run a clinic and be on call. I was employed by an acute trust so it was understandable that the acute work took precedence, and clinics were cancelled as a result.

There were other models. One was the miniclinic. This was run by a GP who was interested in diabetes with specialist support usually from nurses, dietitians and sometimes chiropodists. The GP had often developed an interest in diabetes after working as a house officer or senior house officer attached to a hospital with specialist diabetes care. Often the local specialist team helped start up the miniclinic, supplied educational materials and taught the practice nurse skills, such as how to examine the feet. There was no specific training programme, but many attended courses based at local diabetes centres. The care of people with diabetes was frequently shared with the hospital performing the annual review. One variant was the Wolverhampton model, which

incorporated medical mentorship (Singh et al, 1984).

Another model was that organised by Joan Walker. In Leicester, in the 1960s, each patient met a DSN at diagnosis, who was also a qualified health visitor. The DSN could visit GPs (there were not many practice nurses) and the housebound or the defaulter. The system failed in the late 1970s because of the increasing numbers of people with type I and type 2 diabetes, with no increase in DSN numbers. It also lacked a uniform organisation to ensure adequate review.

## What is needed for a first class service?

A first class diabetes service needs the initial education of members of the primary care team, continuing diabetes education and professional development, mentorship and appraisal, provision of clinical services and new techniques for support.

# Initial education of members of the primary care team

While each locality will differ, there should be a continuing programme to ensure adequate initial training of members of the primary care team. To produce adequate primary care cover, each GP and practice nurse in smaller practices should be trained. In larger surgeries there should be more trained practice nurses.

The training courses should use techniques such as in the Warwick and Bradford courses, which encourage the use of audit. To do an audit an accurate patient register is needed. The courses encourage case studies, which, in turn, encourage reflective practice and consequently change. In the Warwick model an educational project (which drives change itself) has to be evaluated. For example, an audit may show little knowledge about the frequency of erectile dysfunction (ED) in male patients; the project may be a selfassessment questionnaire about ED, and the evaluation might include the need for partners to have been included in the questionnaire. Teaching at such courses should be by both generalists and specialists, preferably from the same locality so that local services can be explained.

# Continuing diabetes education and professional development

Continuing diabetes education and professional development are needed to ensure that each healthcare professional remains able to care for the person with diabetes. Education can take place through workshops using mixtures of didactic teaching and group peer education.

Protected learning time sessions can also be used. One diabetes consultant specialist has developed a teaching pack to help receptionists better understand the needs of the person with diabetes. Further specialised teaching is needed for special needs, such as insulin initiation and insulin dose adjustment. We have also run courses on adjustment of oral hypoglycaemic agents for practice nurses and community pharmacists. These workshops benefit from the same mixture of generalists and specialists and often facilitate group discussions.

### Mentorship and appraisal

Mentorship and appraisal are often informal and achieved during clinical practice, but also may be a formal 'hot seating' (where the appraiser sits in while the appraisee works). Both Bradford and Heart of Birmingham models include this in their design, but the Bradford system in particular emphasises its importance.

#### **Provision of clinical services**

Specialist advice is even more important in the model where most diabetes care is delivered by primary care. In both rural and inner city areas there is a particular need for the specialist multidisciplinary team to be available locally to the person with diabetes. There should no longer be the need for a day to be lost from work to attend hospital. This includes most functions currently provided in general (hospital) diabetes clinics, including group education for the newly diagnosed and for those who want to learn more about diet and treatment.

### New techniques for support

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for practice nurses and GPs. The methods of support incluce courses, study days, electronic audit to full clinical online prompts, liaison with DSNs, consultant doctors and nurses.

#### **Prescribing**

One of the common methods used by community specialist services and some hospital-based services, is to ask the GP to prescribe instead of prescribing directly. This is not patient-centred as the patient has to make an extra visit to collect the prescription. It also suggests to the patient that the suggested treatment is relatively unimportant because otherwise it would have been started immediately. Some outreach clinics use the prescription systems of the acute trust.

We devised a series of FP 10 prescriptions with our address pre-printed, but coded as if we were a general practice. This also allowed adequate audit on expenditure. Stock supplies needed for immediate insulin initiation were purchased by invoice from a community pharmacist. Because we work near to the community pharmacists we have been able to work jointly to improve the delivery of diabetes medication. An example of this was that some GPs had been able to prescribe dossette boxes for their patients and others had not. We circulated a letter to the pharmacists and now have a PCT-wide list of pharmacists who will co-operate in dispensing drugs in the boxes.

### **Educational materials**

People with diabetes seek uniform and accurate information about the disease and its sequelae, and how to access services. Whilst Diabetes UK is increasing its production of educational materials, much has to be left to local provision, or by default, the pharmaceutical companies. We have attempted to provide materials in English and subcontinental languages, including: identity cards; testing books; booklets describing impaired glucose tolerance and diet or tablet treated diabetes; and insulin usage. We show the material to practice nurses or GPs in workshops and they can order it (from our budget) if they think their patients would find it useful. Some material and guidelines are available on our website (www.hobtpct.ac.uk).

# Achievements of specialists in the community to date

There are now many community specialist nurses. If unsupported, their main role is to provide mentorship to practice nurses, aid patient education and sometimes initiate Insulin initiation insulin. can problematical because there should be an opportunity for the independent prescriber (the doctor) to meet with supplementary prescriber (the nurse) regularly and frequently. While some GP specialists perform this role, many feel that they have insufficient training or time.

There is a need for community specialist nurses to have the skills needed by a practice nurse, as well as more specialist skills of the DSNs. Unfortunately, there is no national training programme for community DSNs. A large number of posts have been created, mostly at a high grade. No national programme has been put into place to remedy the need for more trained DSNs.

I have not seen unequivocal evidence that care outcomes have improved with this investment in DSNs. There is no evidence about the effectiveness of community medical consultant diabetologists. One of my roles is to attempt to demonstrate the effectiveness.

### **Problems encountered**

Resources in terms of education, IT and time pose particular problems for diabetes specialist teams.

#### **Education and IT**

Most PCTs have financial difficulties. One was encouraged by their team to invest in a PCT-wide scheme to ensure access of the patient and healthcare workers to an agreed educational package available online. The cost was about £I per patient. The scheme was rejected because it was too expensive! The budget is not high enough for us to be able to translate the educational package into the five subcontinental Indian languages.

Another PCT had an online system that

was inadequate for audit. They wished to employ an IT expert to replace the old database with an up to date system. This was delayed on grounds of cost.

#### Time

It was once said that one important diabetologist was everywhere, but not ever in his clinic! There was a view inherited from the early part of the last century that people could be responsible in a hands on way in various places.

It is now acknowledged that in any one session only one clinical duty should be covered. Community work and hospital work must be planned so that the sessions do not clash. Since on call days often change week by week it does mean that a standard rota is not easily workable.

### **Practicalities**

Practical issues regarding clinical areas and the location of the specialist team affect the effectiveness of the diabetes specicalist team.

#### Clinical areas

Clinical areas are needed to treat, advise and run group sessions with patients. Usually, these are only available in the afternoon, or are the source of fierce competition between services such as child health or sexual health. Some locations are often not suitable for group education, or even for consultation. IT systems may work within healthcare premises, but difficulties can be experienced when linked to a central server. Sometimes these systems are so slow that they cannot be used.

People cannot be taught effectively in unreasonable surroundings or if the location is already used. This is a problem for clinic bookings in primary care premises: they are extensively used from about 09.30 until lunchtime, and then again in the late afternoon. The afternoon is the best time for any specialist team to use general practice rooms or spare space.

# Where should the specialist team be best placed?

In many ways this is the dream of the diabetes centre. Usually, however, these tend are situated in inconvenient places.

No centre design took into account modern IT. Most follow up of patients can be achieved by phone calls but many staff have had no formal teaching in call centre work. The ideal is a diabetes centre within a health centre which encourages specialist and generalist interchange. For at least some of the week the whole team needs to be together to discuss problems and methods of working.

Some accommodation is unacceptable for other reasons. We have had problems from rat's nests, moving locations leaving no forwarding addresses, or telephone number, and we have had to try and fit our own computers. More recently, flooding occurred without staff being moved until a health and safety review!

#### Conclusion

Most of these problems are teething problems of a new system and a new way of working. What is critical is that the PCTs accept that chronic diseases such as diabetes need and deserve investment.

Acute trusts were naturally more concerned with acute medicine (and trolley waits) or surgery (and cancelled operations) than care of the chronically ill. Now that PCTs are involved in acute trust issues there is a threat that they also may dismiss chronic disease as not worthy of investment. Unfortunately, there is no impetus within the NSF for Diabetes (Department of Health, 2003) to improve this.

Burden AC, Jones GR (1982) Diabetes Update Publications Ltd

Department of Health (2003) The NSF for Diabetes: Service Delivery. Department of Health, London

Griffin S (1998) Diabetes care in general practice: meta-analysis of randomised control trials. *British Medical Journal* **317**: 390–96

Hayes TM, Harries J (1984) Randomised controlled trial of routine hospital clinic care versus routine general practice care for type II diabetics. *British Medical Journal* **289**: 728–30

Singh BM, Holland MR, Thorn PA (1984) Metabolic control of diabetes in general practice clinics: comparison with a hospital clinic. *British Medical Journal* 289: 726–28

Walker JB (1953) Field work of a diabetic clinic. The Lancet 2: 445

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