

Seamless diabetes care: The role of the nurse consultant

Jill Hill

This article describes the impact of a PCT-based nurse consultant role in developing a new community diabetes service in a typical inner city area in Birmingham. The service was initiated as part of a national pilot to implement Kaiser Permanente principles, which encourages primary, intermediate and secondary care providers working together. The specific domains of the nurse consultant role have all been key in meeting the challenges of this initiative, and continue to be so to meet the future challenges of ongoing changes in the NHS.

Eastern Birmingham PCT, as it was in 2003 (it has now merged with North Birmingham PCT to become Birmingham East and North PCT), had a population of approximately 250 000 people, served by 59 general practices, of which 32 were single-handed. Of the 10 wards covering the area, 9 were in the top 15% for deprivation nationally. Almost 50% of the population were South Asian, and approximately 9 000 people were known to have diabetes (but this was likely to be underestimated). Many practices referred the majority of people with diabetes in their care to the local secondary care diabetes team in Heartlands Hospital. An audit performed by the strategic health authority showed that a significant number of primary care staff had no recent diabetes training, there was a problem in recruiting and retaining practice nurses, and many of the people with diabetes did not speak English and still kept strong links with their country of origin and its culture. This made standard English-spoken

services inappropriate.

At this time, there was increasing emphasis on moving the management of long-term conditions into primary care. For diabetes, this had been recommended in 2000 by the Audit Commission (Audit Commission, 2000). The impact of the diabetes epidemic meant the model of the traditional secondary care diabetes clinic managing the majority of people with diabetes was becoming increasingly unviable. The capacity of hospital services was also coming under more pressure from the launch of the nGMS contract in 2003 with the drive to achieve diabetes outcome targets. More recent guidance from the Department of Health has encouraged bringing services nearer to people with diabetes by moving services out of secondary care into GP practices and community settings closer to their homes (DoH, 2006).

These rapid changes in the NHS in the last few years have led to concerns about the demise of secondary care diabetes teams,

Article points

1. An audit done by the strategic health authority showed that a significant number of primary care staff had no recent diabetes training.
2. The nurse consultant role was developed from the NHS Plan, with the concept of keeping experienced nurses at the front line.
3. Providing a variety of levels of education is essential to meet the needs of all healthcare professionals who come into contact with people with diabetes.
4. The domains of the nurse consultant role were reflected in the multiple-tasks required to lead the development of a community diabetes service.

Key words

- Nurse consultant
- Community diabetes service
- Kaiser Permanente

Jill Hill is a Diabetes Nurse Consultant, Birmingham East and North PCT.

Page points

1. The nurse consultant role was developed from the NHS Plan (DoH, 2000), with the concept of keeping experienced nurses at the front line, providing direct, expert care for patients.
2. In 2003, Eastern Birmingham PCT, in partnership with Heartland's hospital and neighbouring Solihull PCT, became one of three national beacon sites for implementing the principles of the Kaiser Permanente system.
3. The nurse consultant role in the PCT was initiated primarily by the diabetes medical leadership at Heartland's hospital in consultation with the director of health improvement in the PCT.

along with their experience and specialist skills, and it has been suggested that the numbers of diabetes specialist roles have been affected (James and Gosden, 2007). Further potential tension may develop from the establishment of practice-based commissioning and payment-by-results (Hill, 2007) as commissioners look for cost-effective services delivered by alternative providers. The development of the community diabetes team, therefore, had to meet the demands to move services into primary care, but ensure those with complex needs still had access to specialist skills.

The nurse consultant role

The nurse consultant role was developed from the NHS Plan (DoH, 2000), with the concept of keeping experienced nurses at the front line, providing direct, expert care for patients. Traditionally, the usual career pathway for nurses had either moved into education or management. The NHS Plan envisaged that nurse consultants would provide better outcomes for patients by improving services and quality of care by strengthening clinical nursing leadership. The role consists of 5 domains: expert clinical care (at least for half of the time); education and training; research and evaluation; practice and service development; and leadership. There has been some debate recently that there is a lack of clear nursing leadership (Scott, 2006). The leadership component of the role is probably the most important, with the nurse consultant guiding teams through the changes in the NHS. They should also be proactive about changes, and manage new challenges through service redesign. However, the expert practice component gave me clinical credibility with new primary care colleagues – I was not just a 'suit' – which was very important.

Kaiser Permanente model

In 2003, Eastern Birmingham PCT, in partnership with Heartlands Hospital and neighbouring Solihull PCT, became one of three national pilot sites for implementing

the principles of the Kaiser Permanente system in managing long-term conditions. Kaiser Permanente places a big emphasis on the individual being seen by the right person in the right place at the right time. Unplanned admissions are seen as a failure, health education and the development of self-management skills are essential and mandatory for patients, secondary and primary care clinicians work closely together, and the system relies on strong clinical leadership (Feachem et al, 2002). Some principles, particularly relating to patient education and empowerment, are similar to many encouraged by the *National Service Framework for Diabetes: Standards* (DoH, 2001), Government White Papers (DoH, 2005a; 2005b) and NICE guidance on structured patient education (NICE, 2003), but others were a challenge. Secondary and primary care services are all part of one system in Kaiser Permanente, with one overall budget, so it is in everyone's interest to ensure patients are managed cost-effectively in the appropriate setting. The clinical leadership in Kaiser Permanente is through medical staff. There is not a similar role to the nurse consultant in Kaiser Permanente. However, the system provided a useful framework to encourage dialogue and joint working between the community diabetes services and secondary care, as well as PCT commitment and resources to develop the community diabetes team.

Getting started

The Nurse Consultant role at the PCT was initiated primarily by the diabetes medical leadership at Heartlands Hospital in consultation with the Director of Health Improvement at the PCT. I started in July 2003 along with a new community diabetologist who had a 20:80 split between Heartlands Hospital and the community. I had been managing the diabetes nursing service at Heartlands Hospital before taking on the Nurse Consultant role. This, and my consultant colleague's shared role, was very useful in facilitating dialogue between

primary and secondary care, with a 'foot in both camps'. We were also very grateful for the support from secondary care as we started with the proverbial 'blank sheet' in starting up a community diabetes service.

Our remit was to develop a community diabetes service and to begin moving people with diabetes out of secondary care and repatriating them to primary care. We were given a target of 1000 individuals in the first year. Considering that when we were appointed, we had no office, no team, no administrative support, and the problems identified by the diabetes audit, this was extremely ambitious and, as we began to explore the state of play in the community, unrealistic!

Building a team

Eastern Birmingham PCT has a large South Asian population. As there is a higher prevalence of diabetes in South Asian people (Burden, 2001), it seemed sensible to develop a team that included staff who could deliver culturally appropriate services for these individuals. Fortunately, the Consultant Diabetologist speaks a variety of Asian languages.

We employed a DSN with Bengali and Urdu language skills. We also recruited an Asian educator who had been working for the community dietetic team organising and delivering healthy food messages in South Asian community settings in Urdu. The core skills she had in managing groups, delivering healthy messages, organising education sessions, and the networks she had built up in the local South Asian community were a real asset and a solid base to develop diabetes skills. The use of Asian health workers to actually deliver education to Asian communities, rather than just interpreting for healthcare professionals, can be very cost-effective (Curtis et al, 2003). The team also includes a 0.6 wte dietitian, podiatrists, a full-time secretary and a business manager. Recently, we have employed another part-time DSN (who also works as a district nurse) and a part-time practice nurse with a

special interest in diabetes. This is, however, a very small team for a PCT area that now covers a population of 440 000 people of whom approximately 20 000 have diabetes.

Space was found for a team office by renting rooms in a surgery in the middle of the PCT patch. This area had a large South Asian population, a significant number of single-handed GPs, and is one of the most deprived areas in Birmingham. Our presence in an area with such need helped to build close working relationships with the practices in this area and facilitated the introduction of necessary changes.

Empowering healthcare professionals

As in other inner city areas, there was variable diabetes knowledge and competency among the GP practices in Eastern Birmingham PCT. It was unethical to move people with diabetes into primary care for management unless practitioners were competent to deliver good quality care. The launch of the nGMS contract coincided with the development of the community diabetes team. Although it would potentially increase workload, it very effectively focused attention on diabetes in primary care, and encouraged responsibility for managing diabetes care with the practice. Remuneration for achievement of targets through a number of QOF indicators was an important incentive to develop well-organised diabetes services, or to refer people with diabetes to healthcare professionals who could provide these (Kenny, 2005).

Since its inception, the team has built up a comprehensive portfolio of opportunities for diabetes education for healthcare professionals. The courses are delivered locally by members of the team, with support from local secondary care colleagues as guest speakers. As well as developing diabetes knowledge and skills, local courses have an important role in developing the relationship between primary care, the community team and secondary care diabetes team members. This facilitates easier dialogue for answering queries and reporting problems through emailing or telephoning.

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2. Space was found for a team office by renting rooms in a surgery in the middle of the PCT patch.
3. As in other inner city areas, there was variable diabetes knowledge and competency among the GP practices in Eastern Birmingham.
4. Since starting, the team has built up a comprehensive portfolio of opportunities for diabetes education for healthcare professionals.
5. Providing a variety of levels of education is essential to meet the needs of all healthcare professionals who come into contact with people with diabetes.

Providing a variety of levels of education is essential to meet the needs of all healthcare professionals who come into contact with people with diabetes: a 'something for everyone' approach to education has been built up by the team. The PCT funds 25 places on the locally delivered Warwick Certificate In Diabetes Care course. The Intensive Management of Type 2 Diabetes (Insulin for Life) and the second module of MERIT are also available. Attendance and accreditation in these programmes are now incorporated into the Local Enhanced Service (LES) for diabetes; embedding skills development into resourced primary care

diabetes service delivery.

I also developed the PCT diabetes foundation course for practice, district and nursing home nurses. These are useful as a stepping stone to accredited courses, especially for people who have not studied for a long time. It helps to develop a basic diabetes knowledge base, increases confidence, and encourages networking with the community diabetes team, and the nurse consultant in particular. It is popular as no exams or assignments are required. The course consists of four modules, which can be taken as a complete programme or individually (see *Box 1* for course content and details). Four sets of modules are available annually, delivered in the afternoons after morning clinics have finished, in different venues across the PCT and on different days of the week to facilitate accessibility.

Healthcare assistants play an increasingly important role in diabetes care, particularly as part of district nursing teams and in GP practices. Their diabetes knowledge and skills can vary considerably in standard and depth so the team delivers a basic diabetes course twice a year. This day-long course includes a basic explanation about type 1 and type 2 diabetes, how to recognise hyperglycaemia and hypoglycaemia, how to give simple but accurate advice to people about healthy eating and looking after their feet, and the correct procedure for blood glucose monitoring as appropriate.

Supporting patients

Standard 3 of the NSF for diabetes emphasises the need for self-management skills and patient-centred management plans (DoH, 2001). Self-management skills and people with diabetes taking responsibility for their own health is a key part of the Kaiser Permanente system, with comprehensive handbooks and courses for people with long-term conditions such as diabetes.

The PCT has invested in supplying all people with diabetes within its area a diabetes handbook and hand-held record based on a pack developed by Newham PCT. This

Box 1. The modules of the diabetes foundation course run by the author at her PCT.

Module 1: Introduction to diabetes

Normal blood glucose regulation
Diagnosing diabetes
Type 1 diabetes and type 2 diabetes
Diet and lifestyle (with dietitian)
Tablets and insulin

Module 2: Helping patients to help themselves

What information does the patient need when newly diagnosed with type 2 diabetes
What information does the patient with type 2 diabetes when starting insulin
Practical session with examples of insulin pens
Competent blood glucose monitoring

Module 3: Annual review and screening for complications

The components of the annual review – what and why
Foot care and the diabetic foot, including how to examine the foot (with podiatrist)
Brief overview of retinopathy, neuropathy, nephropathy and cardiovascular disease

Module 4: Acute complications

Diabetic ketoacidosis (DKA)
Hyperosmolar non-ketotic acidosis (HONK)
Management of illness
Hypoglycaemia

should be carried by the individual between primary, community and secondary diabetes care providers, and is given to GP practices by the PCT free of charge to be distributed. The pack was launched via lunchtime meetings (with lunch provided!) to GPs and practice nurses, to explain the format of the book and how to help people with diabetes use it effectively. It has taken time to get established but it is now linked to the diabetes LES (practices have to use the appropriate Read code to record that they have given a patient the handbook). It is available in Urdu and English to all people with diabetes living in PCT who can read these languages.

NICE guidance for cost-effective evidence-based structured group education for people with diabetes has been available since 2003 (NICE, 2003). Initially, with limited staffing resources available, we developed our own 'New to Type 2 Diabetes' session, delivered to people with diabetes whose first language is Urdu by the Asian educator, or by the DSN and dietitian for those people who understood English. The 2-hour session is available in a variety of community settings (such as schools, church halls, and community meeting areas) on different days of the week. Before the arrival of the community diabetes team, group education was unavailable in the community: people with diabetes either had an individual session with the practice nurse (which varied in quality and time allocated) or were referred to secondary care for diabetes education. This did not appear to be a good use of already stretched specialist secondary care skills, and the hospital setting did not seem appropriate for discussion around lifestyle changes and living with diabetes.

Although it does not meet NICE (2003) guidelines, the New to Type 2 Diabetes session is still available as an introduction to living with the condition and to answer immediate concerns. The diabetes team has recently been trained and is now delivering the X-PERT diabetes education programme. As 3 out of the 10 cohorts in the RCT for this programme were delivered to individuals who spoke Urdu, it seemed appropriate to offer

this programme to our population (NDST, 2005). As the diabetes teams in neighbouring Solihull NHS Care Trust and Heartlands Hospital also run the X-PERT programme, there is the opportunity for sharing the quality assurance requirements between the three teams.

We have recently become accredited as the 72nd DAFNE centre in the UK. Lack of resources in both local secondary care diabetes centres did not allow this programme to be delivered in the usual hospital setting. The team accepts referrals from all hospitals in Birmingham for people living in the PCT area, and also from those practices managing individuals with type 1 diabetes in the area.

Agreed local framework for diabetes

One of the early initiatives was a set of diabetes guidelines, developed with both the community and the local secondary diabetes teams. The guidelines development team also included medicines management representatives from the PCT, the community team dietitian, a diabetes specialist podiatrist, practice nurses, and GPs. The contents are comprehensive; from instructions on how to perform an OGTT and how to diagnose diabetes, to management of micro- and macro-albuminuria. Glucose, hypertension and lipid management is based on the UK Asian Diabetes Study algorithms (O'Hare et al, 2004), as a number of local practices are involved with the Heartlands research site. It is a very slim A4 document and is simple and clear. Also included are urgent and non-urgent referral pathways for people with diabetes requiring specialist referral.

More recently, referral criteria have been agreed between Solihull NHS Care Trust, the community team, and the local secondary care diabetes team. They are based on the stratification of risk model from Kaiser Permanente: individuals being seen by the right person in the right place at the right time. The referral criteria document identifies conditions and problems, and advises the most appropriate place of care. This seems simple but is not clear-cut as

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2. The domains of the nurse consultant role were reflected in the multi-tasks required to lead the development of a community diabetes service.
- 3 Expert practice in clinics and contact with primary care staff is important to support them in managing people with diabetes who do not require secondary care referral but still have relatively complex needs.
4. The Kaiser Permanente model was useful in providing a framework to develop services in the community, and recognises the importance of working closely with primary and secondary care colleagues.

there is considerable variation in resources and competence between practices. What is complex for one practice may be routine for another, and so this is built into guidelines.

At the beginning of 2008, we launched our LES for routine diabetes care. This awards extra remuneration for practices that are delivering high-quality services over and above that required by the nGMS contract. The PCT quickly introduced an LES for insulin initiation in 2004 in response to the nGMS contract and to manage the potential surge in referrals for insulin initiation to secondary care as practices aimed to achieve new targets. However, unlike neighbouring PCTs, we delayed introducing the LES for routine care as we wanted to ensure the educational packages for healthcare professionals were well established, and support services for practices (such as, structured patient education and specialist community clinics) and guidelines for diabetes management and referral criteria were all in place.

Summary

The domains of the nurse consultant role were reflected in the multiple-tasks required to lead the development of a community diabetes service. Leadership was essential to shape a vision, and motivate others in the team and in the wider environment. Education and training was required to develop skills in all those who manage people with diabetes. Developing and redesigning services is necessary to meet changing environments and new challenges. Auditing and evaluating gives feedback to the team, and helps to identify areas that need further work. Expert practice in clinics and contact with primary care staff is important to support them in managing people with diabetes who do not require secondary care referral but still have relatively complex needs. The Kaiser Permanente model was useful in providing a framework to develop services in the community, and recognises the importance of working closely with primary and secondary care colleagues. However, new challenges with practice-based

commissioning and payment-by-results can cause potential tensions which may make this more difficult. ■

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