Practical solution to support delivery of primary care led diabetes services

Heather Daly, Anita Khulpateea, Lorraine Martin-Stacey, Jane Fairfield, Minee Patel, Azhar Farooqi, Melanie J Davies

ARTICLE POINTS

1 The National Service Framework for Diabetes addressed the inequalities in provision of diabetes care.

2 The diabetes team in Leicestershire have developed a practice resource pack to address these inequalities in diabetes care.

3 Other key components of the primary care initiative were education groups for people with diabetes and nurse led clinics.

4 Ongoing evaluation has shown that this pack is effective in supporting primary care staff to deliver the standardised approach.

5 Evaluation of the intervention continues and further developments are being considered.

KEY WORDS

- **Primary care**
- **Diabetes services**
- **Practice resource pack**
- **Education**

Heather Daly is a Diabetes Nurse Consultant; Anita Khulpateea is a Diabetes Specialist Nurse; Lorraine Martin-Stacey is a Diabetes Specialist Nurse; Jane Fairfield is a Diabetes Specialist Nurse; Minee Patel is a Diabetes Specialist Nurse; Azhar Farooqi is a GP; and Melanie J Davies is a Consultant Diabetologist, all at the Eastern Leicester Primary Care Trust.

Introduction

Primary care trusts (PCTs) are key in the modernisation of our NHS because they have a responsibility to commission and provide diabetes services that meet the needs of their local community (DoH, 2000). The National Service Framework for Diabetes has challenged healthcare providers to reduce the burden of diabetes by addressing inequalities in provision and to ensure a high quality of care wherever people live (DoH, 2001). In addition to providing support to our primary care colleagues and beginning to address the inequalities in diabetes care, the diabetes team in Leicestershire have developed a practice resource pack, which has been piloted in Eastern Leicester Primary Care Trust (ELPCT). Its success has resulted in the other five PCTs requesting roll-out of the scheme to all 144 practices in Leicestershire.

In addition to the National Service Framework, the National Institute for Clinical Excellence (NICE) has published guidance on various aspects of diabetes management, from glycaemic control to cardiovascular risk reduction and management of eye, renal and foot disease (NICE, 2002a; NICE, 2002b; NICE, 2002c; NICE, 2002d; and NICE, 2004). There have also been a number of appraisals of new treatments for diabetes, including the glitazones and basal insulin analogues (NICE, 2003a; NICE, 2002e). As well as guidance on these very medical aspects of diabetes management, NICE has also reviewed the importance of offering structured patient education (NICE, 2003b). This plethora of guidance can often be bewildering to healthcare professionals in both primary and secondary care.

Our aims

We therefore set out with the aim of providing a user friendly resource that summarised good clinical practice and was consistent with national guidance, but in a format that included useful local information and was customised to the needs of patients in our locality.

Our approach

Leicestershire has one of the largest diabetes services in the UK, with a population of approximately 1 million; of whom 93 000 are of Indo-Asian origin. The population is served by six primary care trusts (*Figure 1*) comprising approximately 144 GP practices, all of which are predominantly served by the specialist service located within the University Hospitals of Leicester (UHL). Clinics are undertaken within both the Leicester hospitals themselves and by specialists going out to a network of community hospitals across the county.

A health needs assessment carried out in 2002/03 for people with diabetes in Leicester, Leicestershire and Rutland confirmed national findings that:

- The prevalence of diabetes is high and rising.
- A large number of cases of type 2 diabetes remain undiagnosed.
- There are population groups in whom the risk of diabetes and its complications are considerably higher (e.g. the Indo-Asian population).
- Demographic and social features of the local population, such as numbers of elderly and ethnicity influence the size of the problem in individual areas.

The rapid increase in obesity, a sedentary lifestyle and improvements in screening is leading to a significant rise in the number of

people requiring treatment. In Leicestershire this could be approximately 50 000 by the year 2010 (Diabetes Strategy for Leicestershire and Rutland, unpublished observations).

A baseline assessment for diabetes service provision in primary care is essential because it is estimated that 75% of patients with type 2 diabetes are cared for solely by primary care (Pearce et al, 2000). Assessment of service provision is vital to establish current levels of service and to enable the development of models of care relevant to the needs of the local population.

We developed an audit tool to evaluate baseline diabetes services in Eastern Leicester Primary Care Trust (ELPCT), which serves a population of 180 000. with an estimated South-Asian population of 50% (Farooqi A et al, 2003). We carried out a 60-minute semi-structured interview with key members of the primary healthcare team in all 33 practices. This baseline audit covered areas such as:

- Whether a diabetes register was present
- The estimated number of people with diabetes
- Whether there were dedicated diabetes clinics
- The number of practice nurse hours
- Whether training was undertaken by practice staff
- Whether structured education was provided to people with diabetes
- Whether the practice undertook initiation of insulin therapy
- The time allocated for annual review and follow-up
- The care of housebound people with diabetes
- Whether the practice was participating in clinical audit
- What sort of equipment and local practice protocols were available
- The ease of access to support from other healthcare professionals, such as dietetics, podiatry and referral to secondary care.

Findings of baseline audit

The key findings are summarised in *Figure* 2. The estimated prevalence of diabetes in 2002 was 5000. The baseline audit identified 6895 (3.8%) people with diabetes.

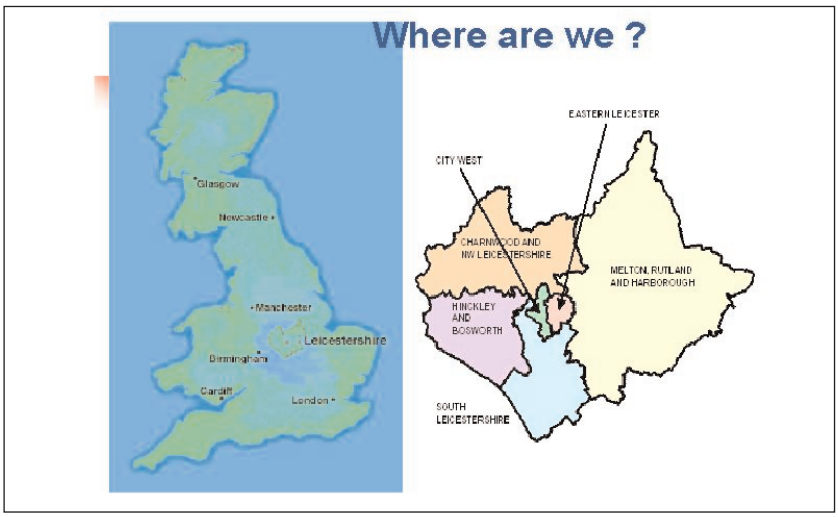

Figure 1. Primary care trusts in Leicestershire and Rutland

KEY FINDINGS

- 10 (30%) practices had a diabetes register, which appeared to be regularly updated.
- In terms of dedicated diabetes clinics in practices, 14 (42%) practices ran clinics (a large variation in total practice nurse hours between practices).
- 13 (39%) of practices had a practice nurse who had completed an 'accredited training course' for diabetes.
- Only 3 (10%) practices claimed that they had a structured plan in providing education for people with diabetes.
- 23 (67%) practices were not able to produce a practice protocol for diabetes, the remainder had protocols of various types (practice, local or national).
- Only 3 (10%) practices felt they had the skills and time to initiate insulin for people with diabetes.

Figure 2. Key findings which emerged from baseline assessment of ELPCT

Following this baseline assessment, the ELPCT used a number of quality co-ordinators to update the registers across the PCT. This extensive exercise revealed that there are approximately 11 000 people with diabetes within the ELPCT, giving a prevalence of diabetes nearer to 6%. Within this PCT, one practice alone has 1500 people with diabetes (Farooqi et al, 2003).

Building a comprehensive package for good practice

From the results of the baseline audit it is evident that a comprehensive package and team approach is required to meet the varying needs of the ELPCT. It was important to build on existing models of good practice but at the same time meet

PAGE POINTS

1 We developed an audit tool to evaluate baseline diabetes services in ELPCT.

2 We carried out a 60-minute semi-structured interview with key members of the primary healthcare team in all 33 practices.

KEY COMPONENTS OF THE PRIMARY CARE INITIATIVE

- Practice resource packs
- Guidelines and aligorithms
- Education groups for people with diabetes
- Role of primary care based DSN
- Single practice initiative
- Insulin starter groups
- Nurse led clinics for complex cases
- Leicestershire wide remit for healthcare professional education

Figure 3. Key components of the primary care initiative: Joint Education with Eastern Leicester (JEWEL)

PRACTICE RESOURCE PACK

- Diabetes guidelines
- Contact details
- Patient information
- Education groups – newly diagnosed and established diabetes
- Initiating insulin therapy
- Information for healthcare professionals
- CD Rom

Figure 4. The practice pack and its contents

PAGE POINTS

1 We designed a package called JEWEL (Joint Education With Eastern Leicester) to meet the varying needs of the ELPCT.

2 A simple practice resource pack is one aspect of this model and contains information to support all practices.

3 The box contains essential information on how to access specialist and primary care based diabetes specialist services to the PCT.

4 There are also guidelines and algorithms for the management of diabetes, including diagnosis and screening, management of complications, blood glucose, lipids and blood pressure management

the needs of those practices struggling to provide high quality diabetes care.

University Hospitals of Leicester and the Primary Care Trust worked collaboratively to identify and resource a model to meet these needs. The overall package was called JEWEL, an acronym for Joint Education With Eastern Leicester; *Figure 3* lists some of key components of the initiative.

A simple practice resource pack is one aspect of this model, and contains information to support all practices. Focus groups for healthcare professionals were held for them to contribute to the contents, and the PCT Diabetes Implementation Group agreed the final format, with patient input. A non-promotional educational grant acquired from a pharmaceutical company was used to resource and produce the 33 packs (*Figure 4*).

The box (a portable rigid plastic case)

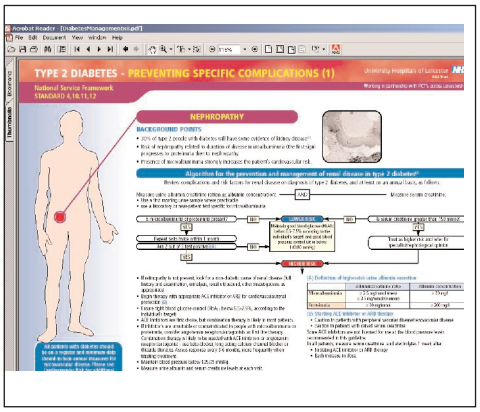

Figure 5. An example of one of the guidelines included in the pack

includes essential information on how to access specialist and primary care based diabetes services specific to the PCT. There are also guidelines and algorithms for the management of diabetes, including diagnosis and screening, management of complications, blood glucose, lipids and blood pressure management, which are all consistent with NICE and NSF recommendations (NICE, 2002c).

Figure 5 gives an example of one of these guidelines. These guidelines and algorithms were agreed across the healthcare community and are part of the Leicestershire-wide strategy for diabetes services. They are included in a laminated A4 format to ensure ease of use. Within the pack there are two folders containing samples of recommended patient information leaflets covering general diabetes information and dietary advice. For each sample information leaflet, there is information about availability, suppliers and costs. Diabetes UK leaflets in relevant languages and locally produced booklets were also included.

Education groups for the newly diagnosed and those with established diabetes have been organised and are run within the local community. Details on how to refer patients and the format of these educational sessions are all part of the pack. In addition there is information on useful websites, journals and book lists to support healthcare professional development. A CD Rom is also included that contains all of the information in the pack so that additional copies can be reproduced or loaded onto the practice's computer system. The pack was launched

at ELPCT's protected learning time event where there were formal presentations by the team, and open discussion on the use of this resource.

After 3 months, practice visits were made to evaluate any benefits or difficulties with the pack to allow revision before the pack was used in other PCTs.

Conclusion

In conclusion, the NSF for Diabetes has a remit to address inequalities in the provision of healthcare. In Leicestershire we have developed a practice resource pack as a way of beginning to tackle these issues. Ongoing evaluation has demonstrated that this pack is effective in supporting primary care staff to deliver the standardised approach. The pack is currently being rolled out to all practices in Leicestershire. This roll-out is being co-ordinated via the NSF Programme Board for Diabetes, with clinical leads for each PCT having the responsibility to ensure that the contents of the pack meet the needs of their local health community by consulting their local implementation group for diabetes. We will continue to evaluate this intervention and make further recommendations to the local implementation team for future developments. ■

Department of Health (2000) *Modernising the NHS*. London: Department of Health

Department of Health (2001) *National Service Framework for Diabetes Standards*. London: Department of Health

Farooqi A, Dodd L, Stribling B, Khunti K, Davies MJ (2003) A baseline survey of diabetes service provision in a city primary care trust. *Diabetic Medicine* **20** (suppl 2): 150

National Institute of Clinical Excellence (2002a) *Clinical guideline: management of type 2 diabetes – management of blood glucose*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2002b) *Clinical guideline: management of type 2 diabetes – management of blood pressure and lipids*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2002c) *Clinical guideline: management of type 2 diabetes; renal disease – prevention and early management*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2002d) *Clinical guideline: management of type 2 diabetes; retinopathy – early management and screening*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2002e) *Technology appraisal: long acting insulin analogues for the treatment of diabetes – insulin glargine*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2003a) *Technology appraisal: glitazones for the treatment of type 2 diabetes*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2003b) *Technology appraisal: patient-education models for diabetes*. London: National Institute of Clinical Excellence

National Institute of Clinical Excellence (2004) *Clinical guideline 10: type 2 diabetes; prevention and management of foot problems*. London: National Institute of Clinical Excellence

Pearce N, Agarwal G, Ridout D (2000) A survey of diabetes care in general practice in England and Wales. *British Journal of General Practice* **50**: 542–45