Diabetes Services: A time for redesign

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It was recognised that the Western Sussex health economy faced a number of challenges when preparing for a redesign of its diabetes services due to its transition into the larger West Sussex PCT that would serve a population of 187 000, 20% of which are over the age of 65 years. The location is large and rural and currently has registered around 7000 people with diabetes. With diabetes prevalence set to double by the year 2010, finding new ways of delivering diabetes care within existing resources was essential, particularly as both the acute unit at the hospital and the PCT faced financial difficulties. This article reports on how these challenges, and others, were approached.

Article points

1. With diabetes prevalence set to double by the year 2010, finding new ways of delivering diabetes care within existing resources was essential for Western Sussex PCT.
2. A local enhanced service specification was introduced to encourage primary care staff to manage people with more complex conditions and increase support for specialist diabetes clinics.
3. Quality of care improved and feedback from nurses and patients was very positive.

Key words

- Service redesign
- Local enhanced service
- Challenges

By 2005, the secondary care medically-led diabetes service in Western Sussex PCT was already working beyond its capacity. There was a large percentage of people with type 2 diabetes attending the service, while less than two thirds of the type 1 population were attending the clinic. Diabetic clinics were cancelled frequently and the time between follow-up appointments was unacceptable: annual reviews were often 16–18 months apart. People who would have benefited from earlier follow up were unable to be seen as the capacity of the clinic did not allow it, plus follow-up appointments were of a 15-minute duration and, for people with complex needs, the clinic was reliant on the senior house officer. While it is recognised that training is required for diabetes care at this level, they were often ill equipped to see the people with the most complex conditions. As a result of this, a number of individuals dropped out of the system and were deemed lost to follow up.

The majority of individuals attending the diabetes clinic were from local general practices. There was inequity in terms of referral to the secondary care service: more rural practices were not referring for a secondary care opinion.

In light of these issues, ways of maximising capacity at a local level were sought. This reflects the national agenda for long-term conditions to be actively managed in the primary care setting (DoH, 2000).

In other areas of the country, similar service models were being adopted, including Northumbria, Sheffield and Bolton. The service in Northumbria demonstrated that 80% of diabetes care can be delivered in a primary care setting (DoH, 2003; DoH, 2006).

Service redesign

A diabetes service redesign was first proposed in May 2005 and took place in January 2006. The aims of the redesign were to:

- effectively utilise specialist nursing and dietetic and podiatry staff across the health community ensuring equity of access to the specialist diabetes team
- deliver the majority of the hospital-based diabetes services within localities nearer to the patients' homes within Western Sussex PCT by undertaking clinics in general practices rather than a central hospital
- manage demand on secondary care consultant services, resulting in improved access for individuals with complex needs and increasing

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Page points

1. To encourage practices to undertake an increased workload in diabetes, a local enhanced service was introduced.
2. The enhanced service specification was introduced specifically to reward practices for managing people with type 1 or type 2 diabetes taking insulin.
3. The aim of joint clinics is to develop practice nurses' and GPs' knowledge, skills and confidence in managing a more complex caseload, thus maintaining a higher ratio of new to follow-up patients.

capacity for more appropriate follow up of this cohort
- increase the knowledge, skills and competence of primary care staff in diabetes care.

Processes

All diabetes nursing teams (3.4 wte) were transferred to Western Sussex PCT employment; this also included investment by the PCT. The service recruited successfully and increased to a full complement of nursing staff (4.4 wte) by attracting staff from outside the area who wanted to be part of this innovative service. As part of a service level agreement, dietitians (1.6 wte) work as part of the PCT diabetes service and the team is led by a diabetes nurse consultant.

To encourage practices to undertake an increased workload in diabetes, a local enhanced service was introduced. Practices were expected to provide all essential services that they were already contracted to provide for all people with diabetes, including the management of people with type 1 and type 2 diabetes treated with diet modification or oral hypoglycaemic agents. The enhanced service specification was introduced with the intention of rewarding practices for managing people with type 1 or type 2 diabetes using an insulin regimen.

Local enhanced service specification

Levels of the local enhanced services (LES) were established (as shown in *Table 1*). Of 23 practices, 22 are participating in the local enhanced service. The PCT project management team developed the contents and payments for the LES.

An initial £1000 was paid to each practice to:
- audit the number of individuals under care of specialist services for assessment of suitability for transfer to primary care
- fund training to ensure practice staff were appropriately skilled to manage people with more complex conditions
- develop a register of individuals with impaired fasting glucose or impaired glucose tolerance
- increase administrative support in the practice for the specialists diabetes clinics.

In order to support practices taking on this additional workload plus a cohort of people with diabetes who would not have been traditionally managed in their care, the diabetes nursing and dietetic team now attend the practices on a monthly or twice-monthly basis (depending on the practice population size).

Following meetings with each practice, the format of the visits was decided, including: frequency of visits, day of visit and the number of nurse specialists and dietitians required to attend. From this, each practice is visited at least monthly by DSNs and a dietician. One nurse specialist will undertake an independent complex clinic and the second nurse specialist will undertake a joint clinic with the practice nurse and/or GP. The aim of joint clinics is to develop practice nurses' and GPs' knowledge, skills and confidence in managing a more complex caseload, thus maintaining a higher ratio of new:follow-up people with diabetes and encouraging the practice staff to undertake the follow up. This further develops practice staff skills as they assess the effectiveness of management plans put in place during the joint consultations. The practice not participating in the LES is also visited and it is hoped that when the practice staff are appropriately skilled they too will participate.

Services maintained in secondary care

Services maintained in secondary care include antenatal clinics, young adult clinics, in-patient care, insulin pump services, paediatrics and complex clinics to support individuals who are still attending the secondary care clinic.

The diabetes nursing and dietetic team work in these clinics under a service-level agreement. The team have maintained a base in the diabetes centre; this facilitates communications between the PCT diabetes team and the secondary care services. This also demonstrates a truly integrated team working both in primary and secondary care.

There is a reciprocal service-level agreement for the secondary care services. The PCT pay the acute unit trust for the consultants to provide education to primary care staff plus clinical governance and meetings for the specialist nursing and dietetic team.

Outcomes to date

To date, there has been a safe transfer of the

Table 1. The two levels of the LES.

Level 1
Conduct all annual reviews for type 1 and type 2 patients.
Manage type 1 patients' reviews minimum twice yearly.
Manage people with type 2 diabetes on insulin.
Refer to specialist PCT diabetes team for insulin starts.
Payment of £150 per patient per annum.
Level 2
Participate in level 1.
Initiate insulin in people with type 2 diabetes.
Additional payment of £100 per patient commenced on insulin.

majority of diabetes services to the primary care setting and safe transfer of people with diabetes to primary care in which all individuals have appointments at appropriate time intervals based on clinical need.

There has also been an improved quality of care owing to the following.

- Diabetes specialist clinics are now held in every single general practice ensuring a more focussed approach to care.
- All practices are visited at least monthly by the specialist diabetes team for support managing more complex cases.
- Clinical supervision of practice staff provides patient-focused education.
- Care is delivered much closer to home for people with diabetes, thereby reducing non-attendance rate.
- Insulin starts are now commonplace in the primary care setting.
- DESMOND (a structured type 2 education programme that meets NICE guidance) is being delivered in four localities per month.
- Structured education for type 1 diabetes was introduced in June 2007.
- A programme for professional development of practice nurses has been developed. It is held at the diabetes centre and supports the practice-based learning opportunities.

Formal evaluation has taken place via a patient satisfaction survey (*Box 1*), a primary care staff survey (*Box 2*), an independent patient public forum review, a PRIMIS audit and a QOF audit. All have demonstrated a high level of satisfaction with the service and improvements in clinical outcomes have been seen.

Secondary care diabetes clinic capacity has increased and continuity of care improved. Only individuals with multiple complex needs are now seen by this service. The opportunity for more appropriate follow up is now possible. Reliance on the senior house officer has been removed; instead, the senior house officer attends the clinic in a training capacity only. They now observe the consultant clinic, which ensures that people with diabetes who have complex needs are reviewed by senior staff only maintains the junior doctors' skills in diabetes care. *Table 2* shows how people with diabetes were seen in the first year after service redesign.

Box 1. Results of a patient satisfaction survey undertaken independently by patient public forum committee.

- 94% very satisfied/satisfied with referral to appointment time.
- 98% very satisfied/satisfied with overall care.
- 97% very satisfied/satisfied with the level of professional communication.

Comments included:

'I am completely satisfied with the service provided.'
'Despite severe misgivings originally, I am delighted it is clearly working well.'
'More personal at health centre, nearer to home and no travel to hospital.'

Box 2. Primary care review of primary care diabetes services.

- Overall, practices felt that the communication was good and enjoy the direct contact with the specialist team.
- Clinical supervision and joint clinics with practice nurses have proven to be beneficial in terms of increasing knowledge and confidence.
- Practice staff have found the diabetes team supportive, flexible and friendly.
- DESMOND has been well received. There was positive feedback from patients and practice staff:

Comments included:

'Seeing patients in a multidisciplinary forum has been beneficial to practice staff and patients'.
'I'm getting much more confident managing patients on insulin now.'
'The joint clinics are invaluable and the diabetes team are excellent at transferring their skills and knowledge.'

Table 2. Distribution of how people with diabetes were seen in the first year after redesign.

Setting	New patients	Follow ups
Primary care clinics	1559	1101
Secondary care services	394	829
Structured type 2 education	266	

Discussion

The service redesign represented a significant change for the diabetes nursing and dietetic team, for people who were used to attending a hospital-based service and for primary care staff who were taking on a more complex caseload; however, the model appears to be working well and outcomes are favourable.

There is a stable primary care work force; the turnover of practice staff is negligible in Western Sussex PCT. Therefore, good working relationships have already been established. In addition, 99% of practice nurses hold an accredited qualification in diabetes care and four GPs have worked as clinical assistants in the secondary care diabetic clinic, therefore increasing their knowledgeable and competency to manage complex caseloads.

A direct referral system to a diabetes or dietetic specialist team has already been established and primary care staff value the expertise and competence of the specialist nursing and dietetic team. The specialist primary care team have also maintained their base as a team and, therefore,

Page points

1. To date, there has been a safe transfer of the majority of diabetes services to the primary care setting.
2. All formal evaluations have demonstrated a high level of satisfaction with the service and improvements in clinical outcomes have been seen.
3. Secondary care diabetes clinic capacity has increased and continuity of care improved.

Page points

1. The service redesign was not without initial difficulties, including confusion for patients and staff, and increased workload.
2. However, having all been based in a diabetes centre, both patients and primary care staff enjoy the easy access to specialist advice.
3. The recent reconfiguration of Western Sussex PCT to a much larger West Sussex PCT has led to a review of diabetes services across this larger organisation.
4. This service meets the national agenda for the majority of long-term chronic conditions in the primary care setting. Despite the challenges, the evaluations from both staff and patients demonstrate it is possible to transfer the majority of diabetes care to the primary care setting, with appropriate specialist support.

the ability to work as a team.

The service redesign has also been a success because the diabetes service is tailored to each individual practice, allowing greater frequency of visits and quicker access to a specialist team. Clinical supervision and joint clinics facilitate learning and ensure continuity of follow up. Joint clinics in each practice have increased knowledge competency and confidence of primary care staff. In addition, dietetic services are now more integrated into primary care, primary care staff are excellent at managing cardiovascular risk factors and the QOF has facilitated appropriate reviews of people with diabetes.

Challenges

The service redesign was not without initial difficulties. These have largely been overcome now; however, it is important to consider the following to provide some insight for other services considering a similar model. Initially, there is a completely different way of working for the diabetes specialist team and a requirement for more travel to a variety of locations. The discharge and transfer of people with diabetes to primary care services was initially adhoc and each practice undertook this differently, leading to some confusion in both patients and staff. There was also misunderstanding and miscommunication to patients regarding the service redesign, leading to anxiety for some individuals who were concerned they would lose touch with the specialist nursing team. In fact, a number of people with diabetes thought the diabetes centre was closing.

The workload of the specialist team is dictated by the practice staff. Initially, some people with diabetes who did not need specialist input were placed in clinics; for example, those with newly diagnosed type 2 diabetes who needed to access DESMOND rather than attending individual appointments.

A further complication was that IT systems in general practices were not uniform, so the specialist team had to learn quickly! Record keeping has also been problematic. While the specialist team accesses and contributes to the general practice computer records, additional, more comprehensive hand-written records are also kept to for governance reasons. Alongside this, a separate database of the activity is recorded, so for each individual, three entries into three records are required. This is clearly time consuming.

Having all been based in a diabetes centre, both people with diabetes and primary care staff enjoy the easy access to specialist advice. Contacting the diabetes specialist team can at times be difficult due to their movements between clinics in primary care. This has now been addressed by ensuring, as far as possible, that one nurse specialist is always at the clinic to deal with enquiries.

Practices sometimes forget the team's commitments across the whole PCT and that changing the clinic schedule is not always possible. Conversely, the specialist team have to acknowledge that diabetes represents a small proportion of the primary care staff's workload.

Despite the enhanced income for the practices from the local enhanced service, it would appear that very few practices have increased the practice nurse hours dedicated to diabetes care. This has caused some frustration for some practice nurses.

Conclusion

The recent reconfiguration of diabetes services across the PCT can be used as a model to be adopted by other areas. Practice-based commissioning is in its infancy in this area and it is unclear at present how this will impact on the service.

This service meets the national agenda for the majority of long-term chronic conditions in the primary care setting. Despite the challenges, the evaluations from both staff and people with diabetes demonstrate it is possible to transfer the majority of diabetes care to the primary care setting if there is appropriate specialist support. A further formal review is planned for 2007 to enable the services to be developed to meet the future needs of people with diabetes. ■

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