

Integrating Primary Care and Specialist Diabetes Teams to deliver better Diabetes Care; The Wakefield Diabetes Service Re-design

Authors: Dinesh Nagi and Janet Wilson

Address : Consultant in Diabetes/Endocrinology and Clinical
Champion for the Wakefield Diabetes Network
Wakefield Diabetes Network Manager

Address for Correspondence: Dr Dinesh Nagi MBBS, PhD (Lond.) FRCP
Edna Coates Diabetes and Endocrine Unit
Pinderfields Hospital, Mid Yorkshire NHS Trust
Aberford Road, Wakefield WF1 4DG

E mail: dinesh.nagi@midyorks.nhs.uk

Additional support during redesign: Tara Kadis, Helen Dobson, Twane Celliers, Kay Bellwood, Richard Jenkins, Ryan D'Costa, and Colin White, Affiliations for these contributors are Mid Yorkshire NHS Trust

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Introduction

There is a recognition that specialist diabetes teams may need to provide services in a range of health care settings consistent with the ethos espoused in the "Teams without Walls" philosophy for adults with diabetes (1, 2). Since the introduction of the National Service Framework for Diabetes, significant progress has been made in improving the quality of diabetes services. This, combined with the Quality Outcome Framework (QOF) for the delivery of diabetes services in primary care, has meant there has been a year on year improvement in the processes measured in delivering basic aspects of diabetes care (3). However, recent reports have also raised concerns about the lack of good quality care for younger adults with diabetes (3). Concern remains, however, about the speed of progress and that despite improvement in care processes the outcomes related to diabetes have not significantly altered and true integration of diabetes services has not been achieved (4). There is also a concern about the existing health inequalities for the provision of diabetes care (5)

The recent Government White Paper suggested that future commissioning of services will be Clinically led (6, 7). Whatever the mechanism to support behind commissioning, there is no argument that specialist and primary care physicians and other stakeholders working together will help improve the quality of diabetes care (4) and various models describing this collaborative approach have emerged.

In this paper we describe our approach to modernise diabetes services in Wakefield to support primary care teams delivering high quality diabetes care. The service redesign has been in progress since January 2009 and led by the specialist diabetes teams and driven by the Diabetes Network. This has resulted in a number of changes in the delivery of diabetes services in our locality.

An interim report on the progress in implementing this model was presented to the Clinical Management Committee in June 2010 with the recommendation that this new way of working become a mainstreamed service. From April 2011, this service has been fully commissioned from Mid Yorkshire NHS Trust, which hosts specialist diabetes services. A full service specification on this component of the re-design has been agreed with the providers of the service.

The overarching aims of this Diabetes Service Redesign were to recommend an exciting and innovative redesign and the main goals of this new model were:

- Improving the overall quality of diabetes care delivered in primary care
- Reducing variations in the delivery of diabetes care across GP practices
- Integrating primary care and specialist care
- Addressing existing health inequalities

The primary outcome measures of this redesign were expected to be:

- Delivery of most diabetes care nearer to patient homes
- Timely access to specialist services in primary care
- Up-skilling of practices in delivering diabetes care
- Ongoing educational support for patients, GPs and Practice Nurses

Background to the Wakefield Model

Wakefield has an active Managed Diabetes Clinical Network which evolved gradually since 2002 from the District Diabetes Advisory Group (DDAG). The Clinical Network has been at the forefront of many significant developments over the last 10 years. The Network has focussed on the consolidation of existing diabetes service and infrastructure by focussing on:

- Retinal Screening Programme
- Insulin Pump Service (2005)
- Structured Education Programmes for Type 1 and Type 2 Diabetes
 - DESMOND and DAFNE
- Revised Diabetes Guidelines (2007, 2009, 2011)
- Active Patient Involvement in the service redesign (Network)
- Developing Integrated Care Pathways
- Information and Technology support (specialist teams and primary care)
- Fostering excellent links between specialist and primary care GP practices

The current attempt at modernising diabetes services has been the result of challenging some historical ways of delivering services by adopting innovation. The philosophy has been to continually improve services but base these new developments on an excellent infrastructure described above. We believe that without these fundamental building blocks in place, further progress would have been difficult to achieve.

Our journey started with the Professional Executive Committee (PEC) meeting in November 2006, when an initial outline for the modernisation of diabetes services was presented and the Network was given complete responsibility for service redesign. Significantly, the ongoing work for the redesign was fully supported by the PEC. Our initial request to take a whole system solution to ensure that it reflected both the national perspective and local issues was backed unanimously by the members of the PEC.

An options appraisal was undertaken (Figure 1) and a clinical model for supporting primary care was developed, which was fully endorsed by all the clinicians and by the Diabetes Network. The options appraisal considered various existing models of supporting primary care and examples of good practice elsewhere to see how these could be applied to develop a local model of care without major disruption to the existing services.

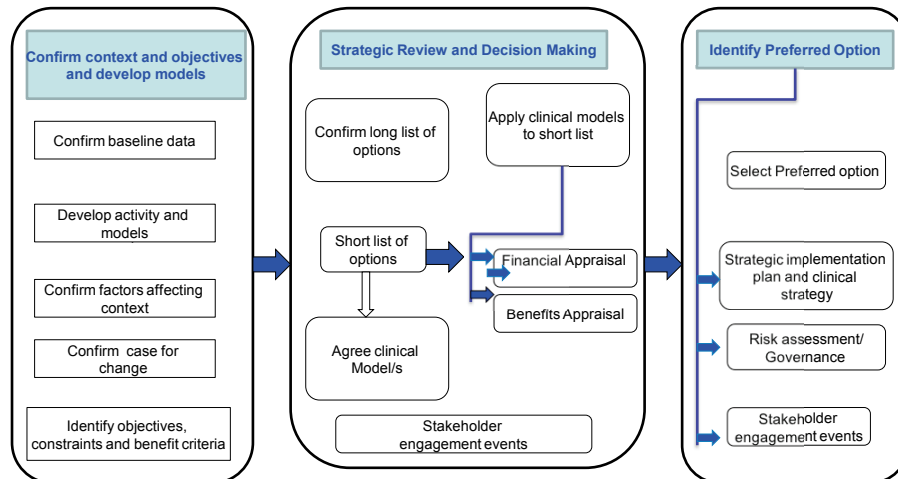


Figure 1: A diagrammatic representation of the options appraisal process

Stakeholder engagement took place throughout this process with individual 1:1 consultations and meeting with others to discuss the options appraisal process. Patient Focus Group were involvement at all stages with engagement of the PBC consortia and all stakeholders kept informed about the progress.

Options Appraisal: the process included;

- Making a case for change
- Performing a gap analysis
- Clarification of our objectives, principles, constraints
- Confirm long list- and a short list of options
- Agree clinical models and non-financial benefits and risks

Objectives were defined:

- Better clinical outcomes, clinical sustainability, and optimising volume
- Improving efficiency and productivity to support long term financial viability
- Safe and appropriate care

- Patient safety and patient experience
- Duplication to be avoided at all costs
- Minimal capital spend
- Maximise existing capacity
- Up-skilling of GPs and PN (clinical capability for future)
- To deliver the benefits quickly

Constraints: We made some early decisions during the options appraisal process as to what we did not wish to do. Creating an intermediate diabetes service, as an option, was discarded fairly early as it did not fit in well with our existing services and was considered to be unaffordable. Neither did we wish simply to trans-locate clinics from specialist centers to primary care or create a model addressing organisational priorities only. We at no stage of this process wished to lose patient focus. We were also aware from the beginning, given the financial constraints, that to create a clinical model with huge/extra drain on resources would not be an option.

The focus of the clinical model became:

- Reducing health inequalities by providing equitable care to all
- Systematic and structured care for all
- Reducing variation in care
- Engaging non-attendees
- Vulnerable groups
- Services easily accessible

We believed that the above could only be addressed by true integration of specialist teams supporting primary care teams and deliver most diabetes care in primary care.

The other significant component of the redesign was the commitment from the Diabetes Network and the Acute Trust to improving in-patient diabetes care. A new in-patient model was piloted in November 2010 to examine its feasibility and workforce implications. The in patient model is currently being implemented. This will not be discussed further in this paper.

A baseline self-assessment of GP practices was undertaken, using a tool developed by initially us and subsequently adopted described in a document by NHS Diabetes (Figure 2) and developing a practice profile (8). This exercise was essential to identify the level of service provided for people with diabetes (Level 1 to Level 4) together with the level of service to which they aspired to deliver in future.

Assessment of Levels of Diabetes Service

	Prevention Identification Impaired Glucose Tolerance/ Impaired Fasting Glucose Diet controlled Type 2 diabetes	Type 2 on tablets Annual review	Management of patients stabilised on insulin Annual review Type 1 and Type 2 diabetes	Initiation of insulin Problem patients Unstable diabetes Annual review Type 1 and Type 2 diabetes	Gestational diabetes Pre-conception care Children and adolescents Inpatient hospital care Complex complications Insulin pump Carbohydrate counting DAFNE
Practice level 1	■				
Practice level 2	■	■			
Practice level 3	■	■	■		
Practice level 4	■	■	■	■	

Primary Care Services

 Specialist Care Services

Figure 2: Model used for self assessment of the level of diabetes services provided by the GP practices and Specialist teams

Implementation of the Wakefield Model

The Wakefield model for supporting primary care included the allocation of a specialist team included a Diabetologist and Diabetes Specialist Nurse (DSN) to a GP practice along with dedicated administrative support. Provision was also made for extra dietetic input to be available to primary care. The Local Enhanced Services (LES) for GPs was reviewed and a new LES was developed for various components of the diabetes service to incentivise practices to adopt new models of integrated working. Once the clinical model was finalised, a business case was developed and costed. This was approved by the Financial Review Board of the PCT in October 2008.

In summary, the clinical model to support primary care consisted of;

- (1) **An initial visit** to GP practices attended by the Diabetologist, DSN, Diabetes Network Manager, Diabetes Network Co-ordinator, Practice Nurse(s) and lead GP for diabetes. Discussions focussed on the logistics of joined up working, an explanation of the model and the new Local Enhanced Service (LES) for diabetes together with the practices' own aspirations for developing diabetes services further.
- (2) **Case Notes Review (CNR):** The patient selection for the CNR was based on the triage system based on glycaemic control. A pragmatic decision was made to review those patients with the worst HbA1c first. The case discussions focussed not only on glycaemic control, but reviewed cardiovascular risk management and other aspects of the diabetes management. An agreement of location of care was agreed for each patient. The potential outcomes of the CNR are shown in Figure 3. As the review included those patients seen in Specialist Diabetes Centres, this allowed an

opportunity to review the last hospital based consultation and some view on the appropriateness of the decisions made.

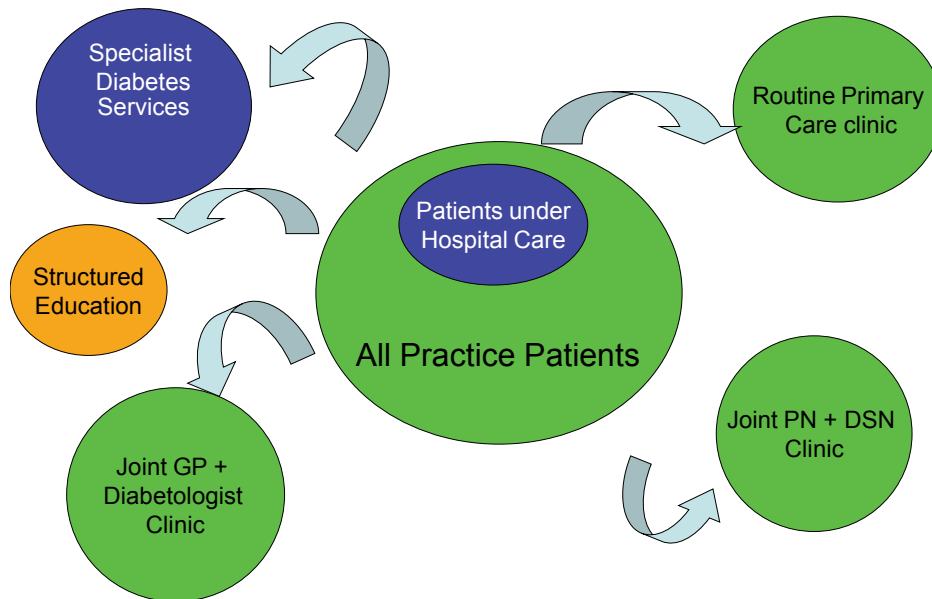


Figure 3: Outcome of Patient Flows from a joint Case Note Review (CNR) based at the GP Practice as a part of Diabetes redesign

(3) **Specialist Primary Care Clinics (SPCC):** These fell into two categories:

- **A joint clinic attended by both GP and Diabetologist:** The consultation was led by the GP despite being a joint clinic. Patients were informed in writing by the practices, prior to their appointment, as to why they had been selected for this clinic. After a joint consultation, based on “care planning” principles, a care plan was agreed with the patient including priorities for implementation. If these patients were still under follow up by specialist teams, they were discharged from follow up.

The frequency of these clinics was based on the practice level of service (2, 3 or 4) but some degree of flexibility was allowed in the scheduling of these clinics. The first clinic took place on 15 May 2009 and to date all 40 practices have been involved in running these clinics, including regular clinics in HRM high security prison in Wakefield.

- **A Joint Diabetes Nurse and Practice Nurse clinic.** The main purpose of these was to allow a significant proportion of care to be shifted to practices and giving the opportunity to up-skill Practice Nurses while working jointly with the DSN. This allowed us to radically change the time lines for insulin initiation (Figure 4), including aggressive insulin titration, GLP-1 analogue starts and regular follow up of patients already established and stable on insulin treatment. Practice Nurses had free access to the DSN attached to the practice (telephone and e-consultation). During the last two years Practice Nurses have begun to feel more

confident and have acquired skills in the above and are less dependent on the DSN to provide these services.

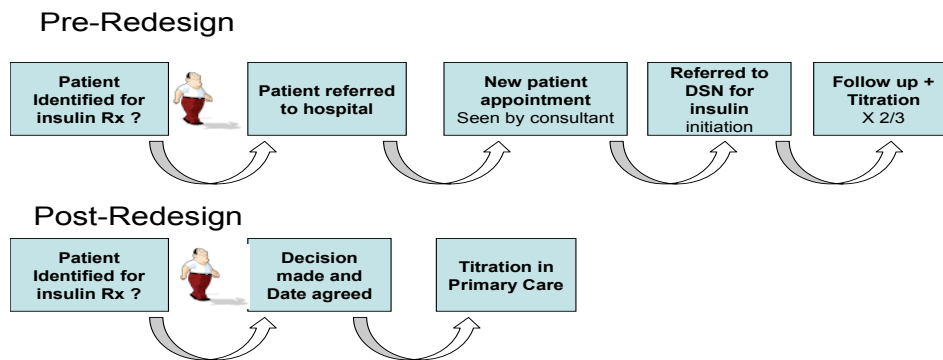


Figure 4: Insulin Initiation Pathway, before and after re-design leading to a radical change in the pathway which reduced significant resource and time wastage.

- (4) **Clinical Case Review:** GPs and the Practice Nurses were allowed clinical freedom to decide which patients (seen in their routine diabetes clinics) they needed to discuss with the specialist teams. In the past and prior to the redesign, these patients may have been referred to the specialist teams. It is recognised by the clinicians that these queries are likely to arise on a daily and weekly basis and to allow these discussions to occur in a timely manner; a process of e-consultation using SystmOne has been agreed and is being implemented. This allows a GP to raise a “clinical task” for a Diabetologist and permission is given for access to the patient record on SystmOne (a web based IT system used by GP practices). The Diabetologist is then able to review patient records remotely and address the clinical queries raised and the email is automatically sent to the GP informing them of the review. If the Diabetologist feels that he or she is unable to provide e-consultation, he can request a face to face review with the patient.
- (5) **Practice Based Education:** An early recognition within the redesign was to address the need for education and training, in addition to what took place during the CNR and Joint clinics. Although some ad-hoc training has occurred based on practice requests (ie insulin regimens, new therapies etc), sixteen modules are being developed for coverage on a wide range of topics in diabetes relevant to daily clinical practices and spanning from prevention of diabetes to early diagnosis, management, and treatment of complications treatment. The responsibility for this lies with specialist teams visiting the practices the Clinical Champion for the Diabetes Network has been given the responsibility to develop these modules.

Impact of the New Model to Date

Although we believe it is too early for us to produce evidence of the success of this model, there are some indirect indicators to support the fact that we are beginning to make a difference.

A recent review (Figure 5) shows that the level of services provided by GP practices has changed with more and more practices taking on insulin initiation and titration and looking after stable patients on insulin treatment.

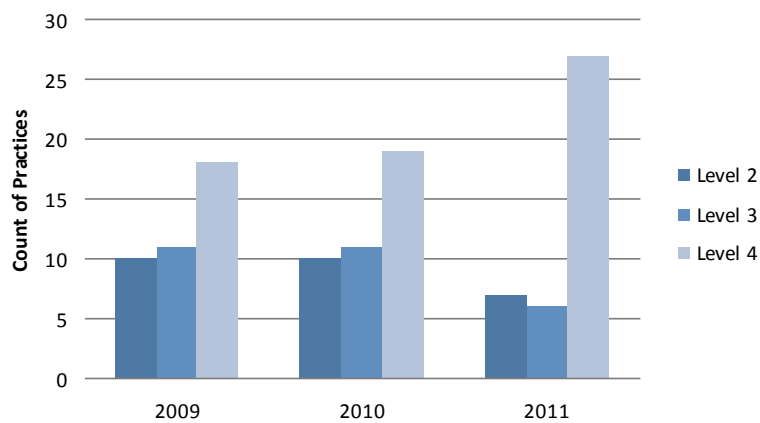


Figure 5: Levels of service provision by the practices at baseline (2009) and over the next 2 years after the services redesign showing improved levels of diabetes care provision

Evidence provided by data on the prescribing for new drugs for diabetes shows that, for example, the usage of certain new drugs has escalated. (Figure 6). Our interpretation of this data is that during CNRs of patients in GP practices a significant unmet need has been identified and the need for new therapies as per NICE guidance is being implemented.

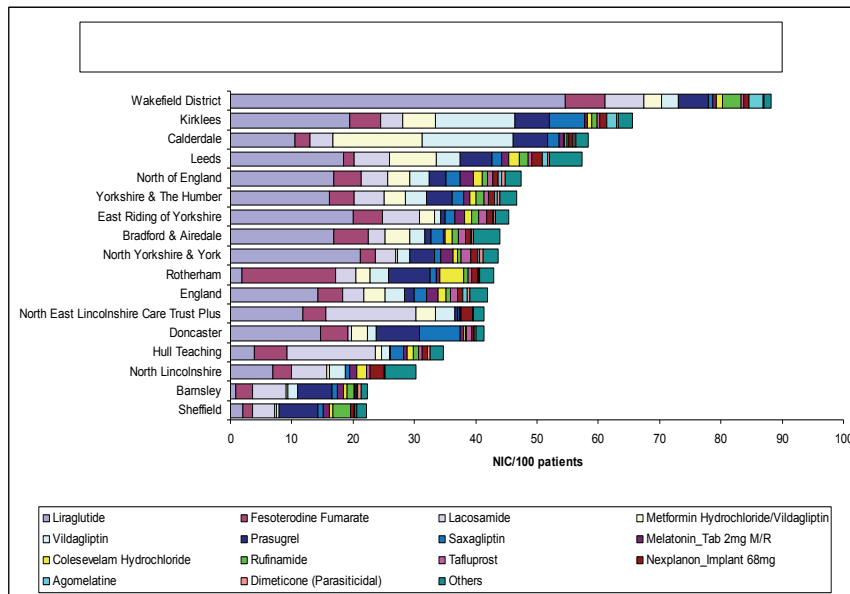


Figure 6: Prescribing costs of new drugs including anti diabetic drugs between April –December 2010.
 The figure shows the significant increase of Liraglutide for Wakefield since diabetes redesign.
 (Data supplied by Yorkshire and Humber SHA)

In 2008/09 and 2009/10 the Yorkshire and Humber Public Health Observatory produced Diabetes Community Health Profiles for each PCT where data from PBMA and Quality and Outcomes Framework were collated and are shown below. It is very encouraging to see the ‘shift’ from 2007/08 of the PCT being in the lower end of the “Low Costs Poor Outcomes” quadrant to 2009/10 where the PCT is actually almost fully into the “Low Costs Good Outcomes quadrant”.

We recognise, that there are many other aspects of improvement in the quality of diabetes care which are difficult to measure but qualitative feedback early in the redesign has been very positive (Figures 7, 8) as identified in patient and Health Care Professional feedback.

A completed modular training of GPs and Practice Nurses will give consistency in the training of GPs. These will also include a module on clinical guidelines and pathways for the patient journey. We were surprised that other GPs who do not currently take a lead in the delivery of diabetes services have expressed the desire to attend these modular sessions based in practices and joined with the clinical sessions.



Figure 7: Examples of the patient feedback after the joint GP and Diabetologist clinic

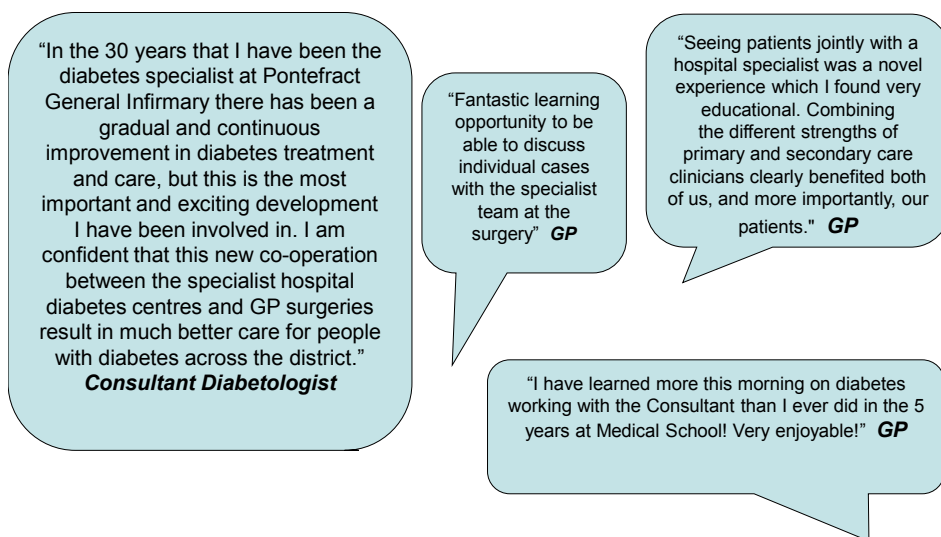


Figure 8: Examples of feedback from Health care professionals on the Diabetes re-design

One of the ancillary benefits was the recognition of unmet need as many patients were identified for referral to specialist diabetes teams, and specialist obesity services. In addition, Quality assurance of the care provided by the specialist teams was another added benefit and we were able to review all the letters sent to the GPs from Diabetes Centres during the case note reviews.

We believe that the service redesign is addressing and achieving all the objectives we set out to achieve and that the redesign is sustainable in the long term and up-skilling of GPs

and Practice Nurses should allow us to cope with the rising tide of diabetes. The redesign has also allowed the specialist diabetes teams to focus their care on patients with complex needs. In addition to this we believe the way this model has been developed and implemented ensures it addresses all the components of QIPP principles in the current NHS.

Summary and Conclusions

Our experience during this redesign has been extremely positive and with significant clinical and non-clinical engagement from all stakeholders. Our planning phase which lasted approximately 12-18 months appeared fairly long but not so if one considers the service planning cycle in the NHS which can span anywhere between 3 to 5 years.

We believe our success in getting the redesign off the ground has been due to a “shared vision” among all health care professionals who have worked together in a true collaborative way. This has led to the start of structured and organised care by the specialist teams to support primary care. We believe the new services have circumvented very circuitous pathways and simplified these to reduce inefficiencies and wastage. Insulin initiation is one example. The specialist services are now more easily accessible and in a timely manner. All this has been possible due to strong clinical leadership and unremitting support from the Diabetes Network. We believe that this joined up working has helped us to realise the ambition of “teams without walls” and we hope that the new service will be key to improving intermediate and long term outcomes related to diabetes in addition to significantly improving quality of care and patients experiences. We believe that it is through the application of these innovative models of care, designed around the principles established in the Government’s recent White Paper, that the standards outlined in the National Service Framework (NSF) for Diabetes (9,10) in 2001 can be achieved.

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