

Model of Care

Integrated Diabetes Care in Derby – new NHS organisations for new NHS challenges

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Introduction

Integrated Care is important for all patients with long term conditions as they move from one part of the NHS to another (Curry and Ham: Clinical and service integration: the route to improved outcomes; King's Fund 2010). In particular patients with Diabetes require education, annual biochemical tests, eye screening, foot examination, dietetic advice and access to secondary services all of which need to be coordinated to avoid gaps and duplication in care resulting in poor outcomes and an unsatisfactory patient experience. (Figure 1).

There are many different models of Integrated Diabetes Care, each trying to provide improved patient care and allow the flow of patients between different parts of the NHS in a timely manner (Ham et al BMJ 342:740-742) (Figure 2). However there are significant barriers to be overcome in achieving an integrated service. These include:

- the integration of Information Technology (IT) systems across primary and secondary care;
- the sharing of patient data between organisations and ensuring Information Governance;
- the perverse financial incentives created by the National Tariff payment system;
- the need for a unified clinical governance structure for patients flowing between primary and secondary care;
- the challenge of joint working between multiple providers of diabetes care;
- the human resource issues of working for multiple NHS organisations;
- the importance of commissioning the whole patient pathway as opposed to subsections of the pathway leading to fragmentation of the patient experience and poorer outcomes.

In order to address these problems we proposed a novel solution of forming a new organisations licensed to provide NHS services that would be jointly owned by both the local Acute hospital and the two PBC groups representing the 34 GP Practices in Derby City PCT.

The New Organisations

First Diabetes is a partnership between First Provider Group and Derby Hospitals NHS Foundation Trust. First Provider Group represents 5 GPs with a practice population of 60,000 patients of whom just over 2300 were identified as having Diabetes. The Joint Venture was set up as a Company

Limited by Shares with each of the partners having one share. Two Directors were appointed, one from the PBC and one from the Acute Trust and a Clinical Board set up to run the operation of the company. A Diabetologist and a GP Co-Chaired the Clinical Board which was made up of Consultant Diabetologists, GPs, Practice Nurses, Diabetes Specialist Nurses, Dietitians, Service Manager, Consultant Ophthalmologist and patients.

The service was commissioned to provide more comprehensive Diabetes care to the local population starting in June 2009. As a result all patients at high risk of Diabetes are now offered screening for Diabetes over a 3 year period. Education groups have been started for patients with Impaired Glucose Regulation as well as for patients with newly diagnosed Type 2 Diabetes and poorly controlled Diabetes (both for patients prior to starting insulin and those already on insulin). Education for patients with Type 1 Diabetes continues to be provided by the Acute Hospital, although this takes place in both a hospital and community setting.

InterCare Health is a partnership between 3 local GPs in Derby and Derby Hospitals NHS Foundation Trust. The 3 GPs represent a PBC group of 29 practices with a total population of 225,000 and a Diabetes population of just over 10,000. The catchment population includes areas with high levels of deprivation and a large South Asian population.

InterCare Health was commissioned to provide more comprehensive Diabetes care to the local population, with the first phase to 7 practices beginning in September 2010, and the second phase in September 2011. It delivers an integrated IT service, advice to practices on individual patients based on a review of the electronic notes, education for patients with newly diagnosed Type 2 diabetes, accredited education for healthcare professionals in primary care, joint clinics between practice nurses and diabetes specialist nurses, and financial incentivisation for GP practices to deliver better diabetes care.

Currently, InterCare Health currently holds a contract with the PCT to deliver care for people with diabetes. However, the Joint Venture model also provides the opportunity to diversify to deliver the care of people with long term conditions other than diabetes. It is set up as a Company Limited by Shares because alternative vehicles such as “community interest companies” or “social enterprises” would not allow such diversification after they have been established. The different models of joint venture organisations are discussed below.

Professional education is provided in both First Diabetes and InterCare Health and is important in providing a structure for closer clinical relationships. The aim of the training has been to develop a Healthcare Professional Diabetes Community in which no individual practitioner is left without adequate support and training.

In each Joint Venture organisation the GPs involved in the management of the company are remunerated at an hourly rate (which is a lower rate than

that paid for GP locums). The Trust receives an income for the time spent on the project by its staff.

Unique character of Joint Ventures

The unique aspect of both First Diabetes and InterCare Health is that they are jointly and equally owned by an acute hospital trust and local primary care organisations (either a PBC or local GPs). This was felt to be essential to deliver care organised around the patient. Putting the patient at the centre of both the clinical pathway and the structure of the organisations made sure that the clinical, organisational and financial directions of the service were aligned.

This partnership working has created constructive challenges to both primary and secondary care as to where the patients should be seen and the level of governance needed to deliver a quality assured service. It also provides for a greater sense of ownership of the whole service by all clinicians than the traditional hospital based model.

Legal Framework

Both First Diabetes and InterCare Health have been set up as Companies Limited by Shares. Other legal options were explored including a Company Limited by Guarantee and in either case potentially setting up the companies as a "Social Enterprise" and registered as a Community Interest Company (CIC). In the end the decision was taken that the Joint Venture organisations should be incorporated as a Company Limited by Shares in order to satisfy the requirements of a 'qualifying body' for the purposes of entering into an SPMS contract. At present neither company has registered for CIC status as this may entail a lack of flexibility regarding the clinical services that can be offered by the companies.

Outcomes

Clinical audit data from GP practices served by the First Diabetes service is now available. This compares outcome data from 2009 to 2011, with particular focus on the management of risk factors associated with diabetes, including blood glucose levels, blood pressure, and cholesterol.

The data shows significant improvements in the number of patients reducing their HbA1c with a 38% improvement in the percentage of patients with a HbA1c <7% and a 26% improvement in the percentage of patients with HbA1c <8%. There has also been an 18% improvement in the percentage of patients reducing their blood pressure (BP<145/85) and a 53% improvement in the percentage of patients achieving a cholesterol target of <5mmol/L.

Within 1 year of the First Diabetes service starting 91 patients referred to the service with poor diabetes control had lowered their HbA1c with 39 patients having an improvement by >1%. 73 were discharged back to their General Practitioners.

903 patients have been screened in the last year with 14 patients diagnosed with Diabetes and 15 patients diagnosed with Impaired Glucose Regulation.

187 patients attended Education courses including those for newly diagnosed Type 2 Diabetes, courses for patients with raised HbA1c (both prior to and on insulin) and for those starting GLP-1 agonists.

The average uptake of retinal screening has risen from 88% to 92% across the 5 GP practices with 620 patients screened locally and a DNA rate of 6.6%. 93 patients were assessed in the last year by a consultant ophthalmologist with 5 patients referred for laser treatment and 5 patients referred for cataract removal. 6 patients were discharged back to the Derbyshire Retinal Screening Service.

InterCare Health has only started providing services for patients with Diabetes in Derby City since September 2010. It is too early to see changes in quality outcomes at present but there have already been improvements in hospital admissions as detailed below.

Reduction in admissions

The new partnership organisations have led to a reduction in emergency admissions of patients with a primary diagnosis of Diabetes. In First Diabetes there was a fall in unplanned admissions from 43 in 2009-10 to 34 in 2010-11. Comparing similar 6 month periods for InterCare Health showed a reduction in unplanned admissions from 54 in September 2009-April 2010 to 46 in September 2010-April 2011. There was an almost 50% reduction in the total number of bed days for patients with a primary diagnosis of Diabetes between those periods. Other factors in demand management during that time may have contributed to this reduction but a comparable reduction in emergency admissions in patients with a primary diagnosis of diabetes was not seen in the other GP practices that were not part of the first phase of InterCare Health.

Improved pt experience

A Patient Satisfaction Questionnaire was handed out to all patients attending the First Diabetes Community Service in February 2010. The results showed:

- 86% of appointments were offered within 3 weeks of referral
- 83% of patients were happy or very happy with the speed referral
- 90% of patients said that getting to the clinic was either easy or very easy
- 100% of patients rated the professionalism of the clinician they saw as either good or very good
- 100% of patients rated the personal manner of the clinician they saw as either good or very good
- 63% of patients rated the care at First Diabetes as Excellent, 22% as Very Good and 15% as Good

Professional Education

In order to upskill the healthcare workforce who provides care for patients with Diabetes in Derby a competency based education module in Diabetes care (accredited by the University of Nottingham) was developed. Over the last 2 years 84% of practices in Derby have attended both this course and other competency training.

The formal competency based training is supplemented by education sessions (both in person and by teleconferencing), and joint clinics between diabetes specialist nurses and practice nurses, and GPs and hospital specialists. There are payments for GP practices at different skill levels to ensure that good diabetes care is incentivised.

Drivers for change

The key to the success of First Diabetes and InterCare Health is the emphasis on partnership working. Partnership working between primary and secondary care is reflected not only in the composition of the Board of Directors but also in the operational structures and the importance attached to joint decision making. Payment by Results and the national Tariff structure has created a financial barrier between primary and secondary care. This has the potential to generate a conflict between good clinical decisions and the financial implications of those decisions. A Joint Venture company owned by both parts of the healthcare community has the opportunity to make the correct clinical decisions and mitigate any consequent financial risk across the health economy.

User involvement

Both Joint Venture organisations have involved the local Diabetes community during the process of their formation. The local DUK group was consulted and patients from the GP practices sit on the Clinical Board of First Diabetes.

Next steps

Partnership working across primary and secondary care should not be limited to Diabetes. There are possibilities for significant improvements in the patient pathway and the quality of care for patients with other long term conditions. Many patients with Long Term Conditions also receive Social Care and we are exploring a closer working partnership with colleagues in Social Services.

Key Elements of Integrated Diabetes Care in Derby

- New Partnership organisations jointly and equally owned by the Hospital and the local GPs
- Single integrated budget for the partnership organisations
- Unified clinical governance structure
- High level of engagement from GPs and the Hospital
- Improved quality and process outcome measures
- Improved patient satisfaction

Acknowledgements

Derby City PCT for commissioning the integrated services; Clinicians and Managers from the GP practices and from Derby Hospitals NHS Foundation Trust; Patients with Diabetes who have helped shape the service

Declaration of Interests

The new Joint Venture Organisations are not-for-profit NHS organisations. None of the Directors receive dividends from the organisations

References (to be completed)

Diabetes Quality Standards

Learning Points

- Redesign of services for patients with long term conditions is best done in collaboration between primary and secondary care
- Joint Venture working enables clinical decision making to take priority in the service
- Collaborative working enables commissioning of a comprehensive service
- Integrated clinical governance requires both hard tools eg LES and soft tools eg meetings, easy communication, nurturing relationships

Online only material:

Comments from GPs, patients and commissioners

“First Diabetes offers high quality diabetes care delivered locally by a team of skilled professionals who are committed to providing a patient centered service delivering evidence based practice. They are able to offer speedy appointments for patients needing urgent intervention and to help patients achieve sensible and personally set targets to reduce the long term effects of having diabetes.” - GP

“The FD service from Stoneleigh House is excellent. They give excellent care and advise to any patients I have sent there and have always improved the diabetic measures of control as well as helping the patient with understanding their condition. The patient satisfaction is very high. They have also helped with my own understanding of Diabetes as well as being a considerable support to our nursing team” - GP

“Highly efficient and best model of integrated care I’ve seen. Easily accessible, it’s local, it’s effective and patients get seen in a timely manner” - GP

“Easy access for us to refer and for patients to get to” - GP

“Readily available and good communication” - GP

“Just a quick note to express my thanks to all who were involved in the IGT event last night in Borrowash. It was an informative evening and provided “some more meat” to the information Dr Bates had already given me. I am pleased to say I am heading in the right direction weight, diet wise. I hope that you are able to run more for other people and areas”. - Patient who had attended an Impaired Glucose Tolerance group meeting that evening

“Very understanding staff” - Patient

“Good Experience” - Patient

“Easy Access” - Patient

“Top marks for Professionalism of the team” - Patient

“as commissioner of the service we have been particularly pleased with the way the service has been developed and brought together by colleagues from primary and secondary care into one innovative organisation, whilst at the same time improving outcomes for patients. Early evaluation shows improvements in QoF measures far greater than comparable practices yet at the same time we have not seen the same level of increase on diabetes drug expenditure as the comparable practices. I would highly recommend this service for such an award and would like to see other such developments in the future” - H Rose, Commissioner for Long Term Conditions, NHS Derby City

Figure 1. Diagram showing the multiple potential appointments for a virtual person 'Bob' with Diabetes (Figure 1a). The Integrated Care partnership between primary and secondary care aims to improve the quality of care as well as the patient experience by avoiding duplication and co-ordinating appointments (Figure 1b)

Figure 2. Different models of Integrated Care attempt to bring together primary and secondary care. However as long as the financial barrier exists between the two separate parts of the health community tensions in the patient pathway will remain

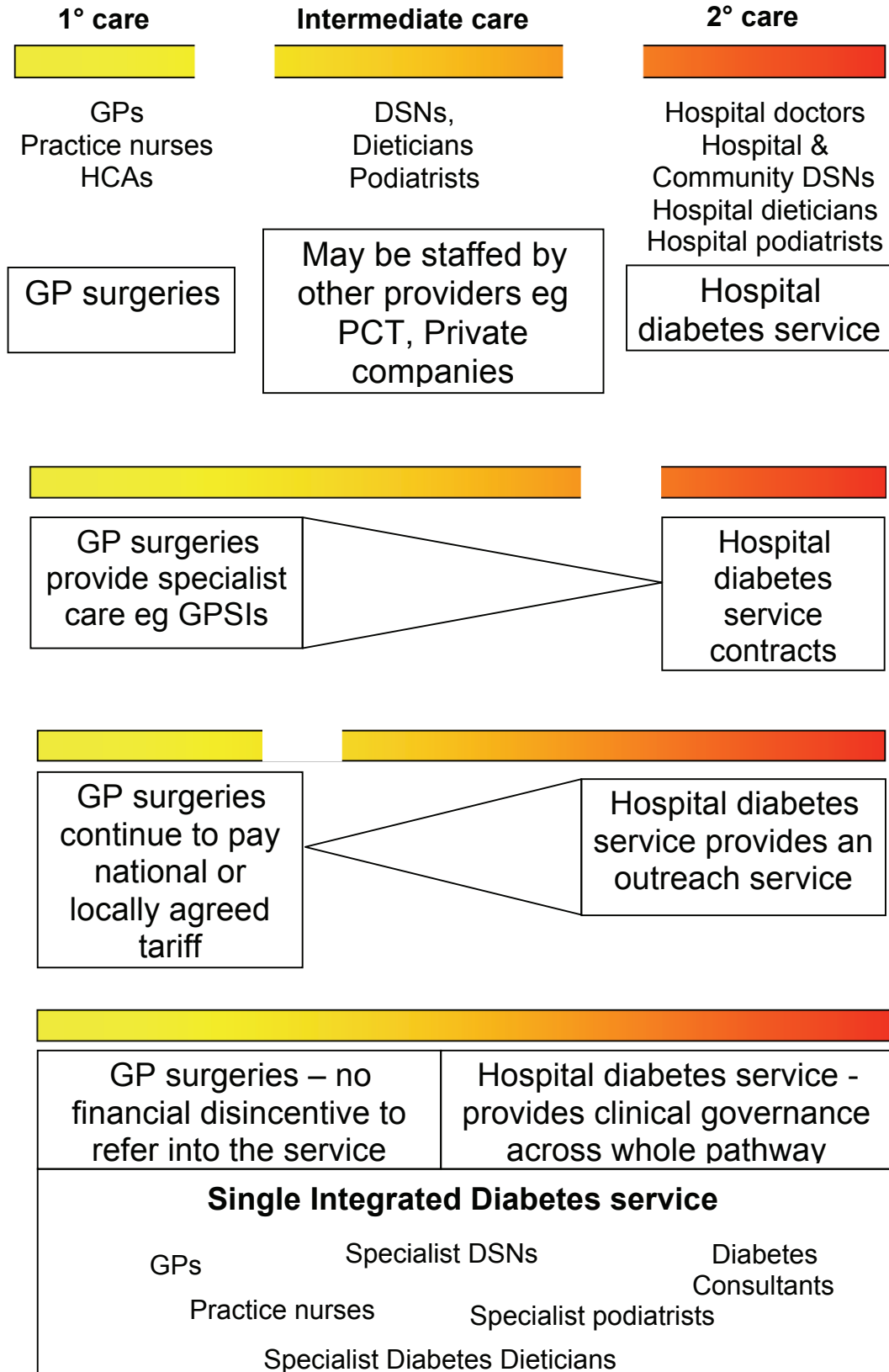


Table 1. Characteristics of the new Joint Venture Organisations: Comparison is made between the two different organisations and their structure

	Patient Population	Diabetes Population	Provision of services	Partnership	Date Started providing services
First Diabetes	58,998	2,315	Diabetes	First Provider Group representing 5 GP practices and Derby Hospitals NHS Foundation Trust	June 2009
InterCare Health	225,000	10,350	Currently Diabetes, potentially any Long Term Condition	3 General Practitioners representing 20 GP Practices and Derby Hospitals NHS Foundation Trust	September 2010

Figure 1a

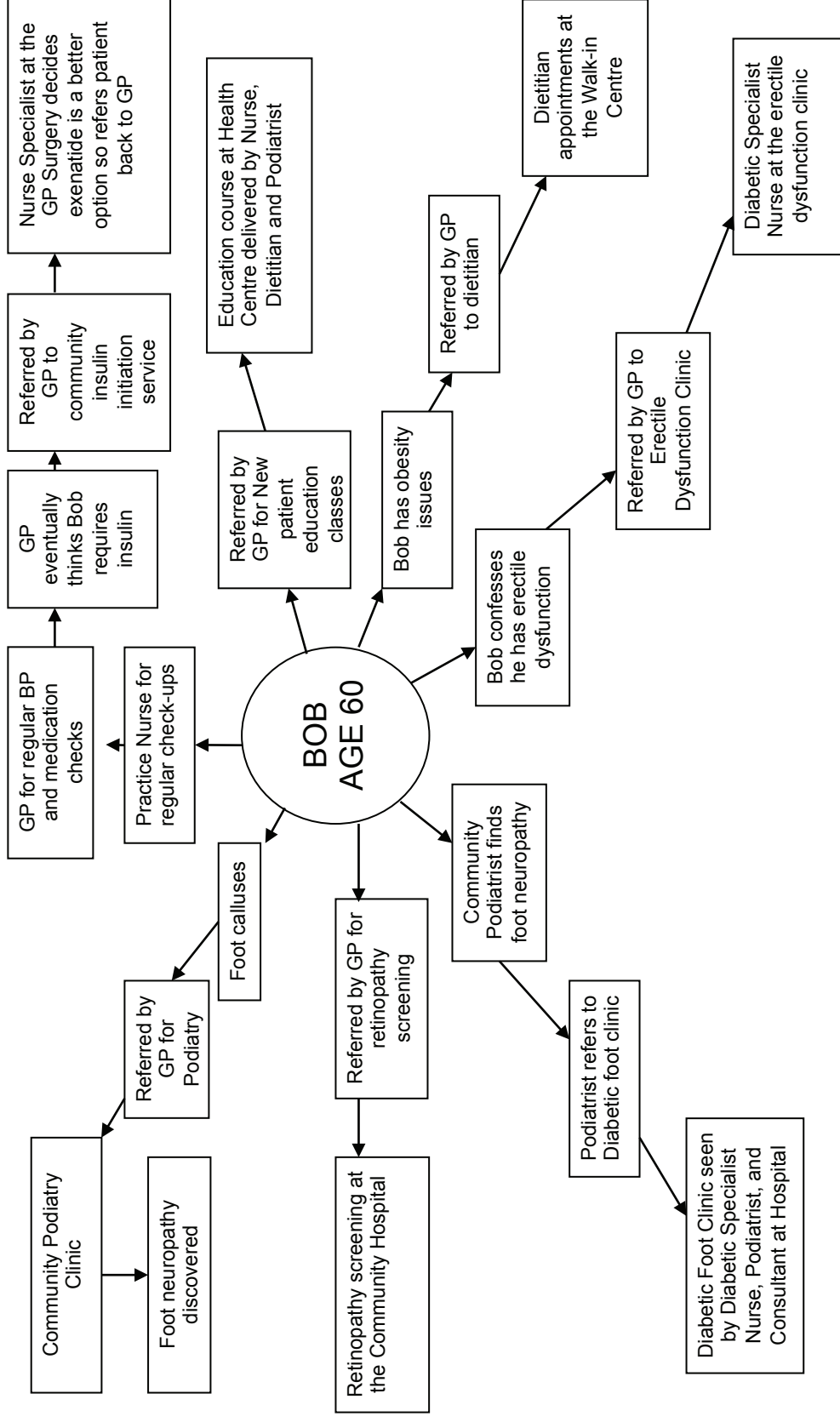


Figure 1b

