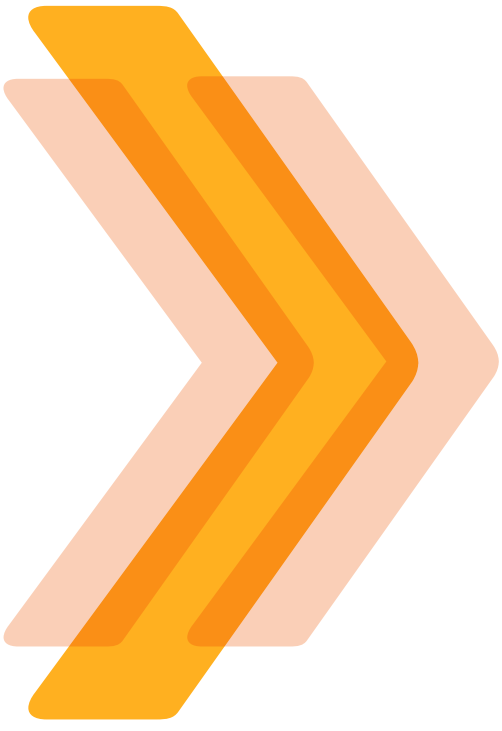
The King's Fund

Ideas that change health care

CASE STUDY

Portsmouth and South East Hampshire diabetes service



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Specialists in out-of-hospital settings

As part of the drive to keep patients out of hospital and better integrate services across settings, consultants are starting to develop new models of care that link secondary, primary, community and social care professionals.

This case study is one of six, which form part of a project undertaken by The King's Fund to investigate the different ways in which consultants are working beyond their traditional boundaries. The King's Fund's staff reviewed relevant documentation and interviewed staff to help identify the key characteristics of this new way of working, explore the challenges in establishing services of this type and understand what benefit they could bring for patients and the NHS.

The other five case studies are:

- Whittington respiratory service
- Leeds interface geriatrician service
- Imperial child health general practice hubs
- Sunderland dermatology and minor surgery service
- Haywood rhematology centre.

Further details on the other study sites can be found at: **www.kingsfund.org.uk/specialistscasestudies**

For an overview of the project, including key strategies for out-of-hospital working, the challenges to developing these services and the benefits for patients and the NHS please go to: **www.kingsfund.org.uk/specialists**

Background

Six per cent of the English population (around 2.7 million people) have been diagnosed with diabetes, while it is estimated that around 500,000 remain undiagnosed (Diabetes UK 2014). Diabetes prevalence is expected to continue increasing to around 9 per cent in 2025.[1] The NHS spent at least £3.9 billion in 2010 on care for people with diabetes (National Audit Office 2012). Obesity is the 'most potent' risk factor for type 2 diabetes, and underlies the spread of the condition (Diabetes UK 2014).

The National Service Framework for Diabetes was introduced in 2003, outlining quality standards for diabetes care. The care process indicators measured have since improved, but significant differences remain in the quality of care received by patients living in different areas, among those with type 1 compared to type 2 diabetes and among ethnic minorities (HSCIC and Diabetes UK 2013).

Integrated primary and community care services and partnerships between generalists and specialist clinicians are seen as an effective way to ensure people with diabetes receive the advice, support and care they need without inconsistency or duplication (Diabetes UK *et al* 2007; Diabetes UK 2014). A range of different diabetes service delivery models has evolved in the last decade. In some areas, care is led by hospital and specialist services, in others, by GP practices and by intermediate community services (National Audit Office 2012).

1. Based on Association of Public Health Observatories model with prevalence estimate certainty limits: 6.3-13.3 per cent.

Overview

In Portsmouth and the surrounding area, the care of a group of diabetes patients who were previously managed at Portsmouth Hospitals NHS Trust has shifted to general practice. The service defined six patient groups, known as the 'super six', whose care would continue to be managed in hospital. The ongoing care of all other patients with diabetes was discharged to primary care.

The 'super six' are patients who require high levels of diabetes expertise, require multidisciplinary input or are inpatients:

- inpatients with diabetes
- pregnant women with antenatal diabetes
- type 1 diabetes patients with poor control of sugar levels
- patients with complications requiring diabetes foot care
- patients who require insulin pump therapy
- patients with nephropathy and receiving dialysis.

A traffic light self-assessment system was used by practices to review patient lists for discharge into primary care: green indicated that they were happy to take on the patient's diabetes care immediately; orange indicated that the practice would require new skills or support in caring for a complex patient before they could be discharged; and red indicated that the patient fell into one of the six patient groups to be seen in the hospital. Patients were transferred into primary care after practices identified the outstanding skills and support they would need to support them.

To facilitate this new way of working, a community diabetes team (CDT) provides support and education to primary care professionals. The team consists of diabetes consultants from Portsmouth hospital and diabetes specialist nurses. It supports 82 GP practices across Portsmouth, South Eastern Hampshire and Fareham and Gosport CCGs. Within this population, there are around 32,000 people with diabetes.

The team offers specialist support and advice to professionals in general practice in five ways.

- **Email service for specialist advice.** This is usually operated by the specialist nurses, but emails can be marked for the attention of consultants. The team usually responds to queries within 24 hours. Its main users are practice nurses.

- **Telephone service for specialist advice.** Consultants are available between 5.30pm and 7pm Monday to Friday; specialist nurses answer during the working week.

- **Biannual practice visits from consultants.** Practices can choose what they want consultants to focus on during the visits. Popular topics include discussing diabetes-related QOF indicators, complex patient review and team education. Participation in the practice visit programme is incentivised by an LES payment.

- **A free comprehensive multidisciplinary diabetes care education programme.** Run primarily by diabetes specialist nurses with consultant input, the programme is free for all clinicians and health professionals in the area. It is mainly attended by GPs, practice nurses and others involved in diabetes care in general practice. The programme covers a range of topics in diabetes care including monitoring, complications and pharmacology. The team also works with local GPs and the Royal College of General Practitioners (RCGP) to expose GP trainees to diabetes care in hospital and patient education schemes.

- **Education for newly diagnosed patients.** The specialist nurses also run DESMOND courses for newly diagnosed type 2 diabetes patients to educate them about the disease, its potential complications and the best ways to manage it.

There are two community diabetes teams, located in Solent NHS Trust and Southern Health Foundation Trust. They are funded via the trusts' block contracts that cover the telephone and email helpline, practice visits and the education programme. The community trusts employ the consultant team from Portsmouth hospital. They pay for four programmed activities of consultant time, which the consultants have withdrawn from their acute contracts.

The Portsmouth area has a history of initiatives to develop skills in primary care for managing more complex diabetes patients outside hospital. In 1991, the Royal College of General Practitioners funded a small-scale pilot run by a GP with special interests (GPwSI) and a nurse to facilitate diabetes care in general practice. In 2009, a team of diabetes specialist nurses was set up in one PCT that ran a staff education programme similar to that now delivered by the community diabetes team. After a new clinical director took over at the acute trust, there was renewed interest in how specialists could support primary care colleagues to manage more patients in the community. The service in its current form began in South Eastern Hampshire and Fareham and Gosport CCGs in 2011 and in Portsmouth in the latter half of 2012.

Referral pathway

Prior to the introduction of the 'super six' model, complex patients whom GPs did not feel comfortable managing in primary care would be referred to the hospital consultant team. Patients would rarely be referred back to primary care, and ongoing monitoring and management of their condition would be undertaken by the acute trust. In the new model, there is a clearer division between consultants' and general practice responsibilities, ensuring only six patient groups are referred to hospital-based consultants for ongoing care. Some are temporarily placed in those groups and may be discharged back to primary care (for instance, antenatal diabetes patients).

A typical pathway from the patient's viewpoint

- Diabetes diagnosis, usually in primary care
- Referral to DESMOND patient education course introducing diabetes and the best ways to live with it
- Regular monitoring appointments with practice nurses, health care assistants and/or GPs (depending on practice approach), who can call upon specialist advice and support from diabetes consultants and diabetes specialist nurses
- Referral into secondary care for patients with a diabetes diagnosis who are among the 'super six'
- Some patients enter the 'super six' group as they develop diabetes complications like neuropathy and foot complications
- Some leave the group and move back into primary care (inpatients after discharge, older type 1 patients who achieve better control, antenatal diabetes patients after childbirth).

Innovative features

- The consultant has become an **educator**, dedicating part of their programmed activities to supporting and educating primary care colleagues, rather than delivering care to patients. Importantly, consultants who work in the hospital also conduct some educational sessions and GP practice visits, building links between the hospital and GP colleagues.

- The service offers **training** in this way of working for specialists of the future. Specialist trainees accompany consultants on their GP practice visits and community work. The Portsmouth service is the only one in its deanery to offer experience of this type of community-working.

- By identifying a **clearly defined set of patient needs** that trigger referral to the hospital diabetes service, the service has reduced the number of patients seen in hospital and enabled diabetes consultants to focus clinical time on patients who require expert or multidisciplinary input.

Impact

- According to data extracted by the team, 1,138 patients have been discharged from secondary to primary care since the service was established in 2011. This has reduced the proportion of diabetes patients whose care is led by hospital-based consultants from between 15 and 18 per cent to 10 per cent. The number of **general diabetes referrals** to the hospital has reduced from 15 per month to zero, meaning the trust no longer runs general diabetes clinics.

- There are indications that **diabetes outcomes** have improved following implementation of the new service model. Data provided by the trust show that the hospital's hypoglycaemia admissions fell from 224 to 198 between 2011/12 and 2013/14; diabetic ketoacidosis admissions fell from 112 to 82 over the same period. The lower limb major amputation rate fell from 2.4 per 1,000 patients with diabetes in 2010/11 to 1.3 per 1,000 in 2012/13. This does, however, remain above the national average of 1.1 per 1,000.

- Multiple interviewees from general practice and the community diabetes team reported that **practice nurses** were increasingly taking on the work of regular diabetes monitoring appointments, medication review and lifestyle advice previously carried out by GPs. Although the rapidly growing demand for diabetes care could have driven this change, it appears that the support available in Portsmouth has enabled this shift. The practice nurse and diabetes specialist nurses interviewed reported increased satisfaction in their changed roles.

Barriers and enablers to service development

Local context

- Although a community diabetes service with educational initiatives already existed in the area, there was little consultant engagement. The **drive and leadership** provided by a charismatic new lead diabetes consultant at the acute trust was key to getting buy-in from the consultant team for the new way of working, and overcoming resistance within the hospital to the discharge of patients into primary care.

- Before the service was initiated there were varying levels of confidence and willingness in general practice to take on the care of complex diabetes patients. However, the hospital consultants' **close and continued engagement with general practice** enabled the service to overcome initial resistance. The process of dialogue prompted by the traffic light self-assessment system was reported to help the consultants better understand the educational needs of practices and gave primary care professionals confidence that they would have access to specialist advice when needed. The consultants, with the backing of the CCG, also arranged extra meetings with the least-engaged practices to encourage their participation and reassure them that support would be available. A GPwSI was also employed as part of the community diabetes team specifically to facilitate the introduction of the service. That person met with GPs, helped to triage new referrals and was involved in the design and delivery of primary care education initiatives.

- The **commissioner** played an important role in setting up the service, primarily as a convener. Commissioners drew together clinical colleagues from the local area and general practice to work together in designing the new diabetes service. The commissioner was also willing to take a risk in funding the new model of care when there was no guarantee GPs would change their referral

behaviour. Interviewees reported that the CCG was relatively confident that the team could shift the care of most diabetes patients to primary care.

Service design

- By **clearly defining the patients** to be treated in hospital and primary care and supporting primary care practitioners to diagnose and treat more complex patients, the model reduces unnecessary use of hospital resources, segments the patient population to focus clinician time on the most complex cases and avoids routine duplication of diagnostic work.

- Interviewees identified having the **same consultant team working across both hospital and community settings** as important to the service's success. It allowed consultants to build strong links among secondary, community and primary care colleagues. Interviewees also felt that the increased contact between general practice and the community diabetes team meant the channels of remote advice via email and telephone were used more frequently.

- The Portsmouth area **does not have an intermediate community service**, as the community diabetes team provides education and support but does not hold its own case load of patients. Interviewees felt this was an important enabler of consultant engagement. If acute trust consultants also treated patients in the community service, a conflict of interest would arise, as they would effectively be in competition with their own acute trust for complex diabetes patients.

- When designing the service, there was some uncertainty about the **clinical governance** arrangements covering remote specialist advice via phone or email. The key issue was whether the advice provided by the community diabetes team made it responsible for any failings in the care of patients whom they had advised about. To clarify this, they have created a clear division of clinical governance responsibility. Practices are ultimately responsible for the care and advice that they give to patients. The team recommends that practices record all interactions with them, including recording their interpretation of phone advice and archiving email exchanges with the nhs.net email accounts. They run spot checks on whether this information is retained during their practice visits. Part of the consultants' community sessions are reserved for clinical governance activity. They regularly review and audit email advice from the community

diabetes team and give feedback to other members of the team about the advice they provide.

Funding arrangements

- Funding arrangements that compensated the acute trust for **lost Payment by Results income** were key to ensuring acute trust buy-in. The community diabetes team contracts with the Portsmouth consultant team for four programmed activities of consultant time, which the consultants withdraw from their acute contracts. The consultants waived the Clinical Excellence Awards (extra payments awarded to consultants in addition to their salary) that they would usually be paid through their individual contracts for the time they spent on community work; they retained them in their acute trust contracts.

- The community diabetes team **contracts with the acute trust's** consultant team for a set number of consultant programmed activities, rather than employing their own consultants to work solely within their community service. Interviewees highlighted two benefits. The consultant element of the service was not reliant on one individual who must take 10 weeks of leave in a year. The consultant team is contracted to the providers as a group, giving the trust 52 weeks of cover. It also means that the same consultants work across all settings.

- **Financial incentives** were used to encourage practices to engage with the community diabetes team. A pre-existing diabetes LES was modified to require practices to discuss the outcome of their diabetes care reviews and receive biannual CDT visits. The consultants' offer to discuss QOF indicator achievement during their biannual visits helped GPs improve their QOF performance and secure resources to pay for the extra care they now provide in general practice. However, there was no consensus among interviewees as to whether the extra income from the LES and the QOF maximisation was enough to cover the increased costs of diabetes care for practices.

References

Diabetes Modernisation Initiative (2014). *Living well with diabetes: learnings report from the Diabetes Modernisation Initiative.* Available at: http://dmi-diabetes.org.uk/learnings/ (accessed on 23 September 2014).

Diabetes UK (2014). 'Diabetes: Facts and Stats Version 3'. Diabetes UK website. Available at: www.diabetes.org.uk/Documents/About%20Us/Statistics/Diabetes-key-stats-guidelines-April2014.pdf (accessed on 13 June 2014).

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Health and Social Care Information Centre and Diabetes UK (2013). *National Diabetes Audit 2011-2012 Report 1: Care processes and treatment targets.* Leeds: Health and Social Care Information Centre. Available at: www.hscic.gov.uk/catalogue/PUB12421/nati-diab-audi-11-12-care-proc-rep.pdf (accessed on 23 September 2014).

National Audit Office (2012). *The management of adult diabetes services in the NHS.* London: The Stationery Office. Available at: www.nao.org.uk/wp-content/uploads/2012/05/121321.pdf (accessed 13 October 2014).

Further information about the service

BMJ service description: http://qir.bmj.com/content/2/1/u201112.w708.full

Multi-disciplinary education: www.porthosp.nhs.uk/departments/Diabetes-and-Endocrinology/Documents/Programme%20Schedule%202014-15.pdf

Other diabetes services that include advice, support and education for primary care include the Diabetes Modernisation Initiative in Southwark and Lambeth (Diabetes Modernisation Initiative 2014) and the North West London Integrated Care Pilot, which featured a diabetes community service: www.nuffieldtrust.org.uk/sites/files/nuffield/publication/evaluation_of_the_first_year_of_the_inner_north_west_london_integrated_care_pilot.pdf

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