Diabetes professional care: ways to improve joint working and individualised patient care

Improving joint working between health care professionals and across different service providers, and a stronger focus on prevention and individualised patient care, were central themes at the Diabetes Professional Care conference held in London, November 2016, and attended by more than 1000 health care professionals, managers and policymakers.

Susan Mayor reports on why these measures were identified as being essential to optimise the treatment and care of patients with diabetes.

**Much stronger focus on diabetes prevention**

'We need a much stronger focus on the prevention of diabetes,’ Professor Jonathan Valabhji, National Clinical Director for Obesity and Diabetes, NHS England, and Consultant Diabetologist at Imperial NHS Trust, London, told a packed conference in his keynote address.

'We think we need to be more proactive,’ he explained.

'Where do we start? We chose type 2 diabetes because there is good evidence that if we take people at risk and intervene with behavioural modification designed to support weight loss and physical activity we can reduce the cumulative incidence by up to 60% in three years.’

Professor Valabhji outlined the Healthier You: NHS Diabetes Prevention Programme, which started in 2016 covering a first wave of 27 areas of the country, making up to 20 000 places available to people already identified to be at high risk of diabetes. Patients referred to the programme will be offered at least 13 education and exercise sessions, each lasting 1–2 hours.

'This is the flagship prevention programme in the NHS,’ he said. ‘We hope to show that we can achieve this within three years.’

He argued that prevention of diabetes within this timeframe was achievable, whereas a much longer programme would be needed to prevent other common health challenges such as myocardial infarction.

Preventing diabetes is a good example of how the NHS can improve patient and clinical outcomes at the same time as realising a return on investment, Professor Valabhji suggested.

The impact analysis for the NHS Diabetes Prevention Programme estimated that it would save the NHS around £35 million over 20 years at a cost of £270 per patient enrolled, by preventing around 4500 cases of diabetes for every 100 000 people taking part.

'It’s one of the most exciting things I’ve ever been involved in within the NHS, as part of a programme that’s implementing a new service nationally.

‘Most areas of health care cost money, so realising a return on investment is difficult,’ Professor Valabhji pointed out. ‘But there are four further areas where we think we can do a lot of good for patients with diabetes at the same time as achieving a return on NHS investment,’ he said. These are:

- Achieving the three diabetes treatment targets (HbA1c, cholesterol and blood pressure in adults) and tackling the variation nationally.

- Providing access to, and achieving attendance at structured education, pursuing the self-care agenda.

- Ensuring every hospital site has a multidisciplinary foot service. This approach can achieve up to a 50% reduction in amputation rates in a relatively short time, but only 75% of hospital sites currently have a multidisciplinary foot service.

- Improving inpatient diabetes care. Three-quarters of all hospital inpatients have diabetes, which is associated with longer length of stay and higher complication rates, and which can be attenuated by access to a diabetes specialist team.

The first two of these priority areas will receive most of the budget and will be assessed through the clinical commissioning group (CCG) Improvement and Assessment Framework, with a metric on diabetes treatment targets and a second on structured education, Professor Valabhji concluded.

For further information see: Healthier You: The NHS Diabetes Prevention Programme (NHS DPP); https://www.england.nhs.uk/ourwork/qual-clin-leaddiabetes-prevention/.

**Putting patients at the heart of redesigning diabetes services**

Patient involvement is essential in redesigning diabetes services to improve care and outcomes, emphasised Dr Mark Chamley, Clinical Lead of Lambeth Diabetes Intermediate Care Team and a GP with Lambeth CCG.

He reported on a major redesign of the diabetes service in Lambeth, South London, which started in 2011, when the diabetes service followed the traditional model of care of patients seeing their GP for most of their care with input from hospital outpatient clinics when needed. (Figure 1 illustrates the new structure of the service.)

There was considerable variation in the quality of care provided by the 47 different GP practices in Lambeth. ‘Overall, we were in the bottom national quintile for blood glucose control,’ Dr Chamley reported. There was a high rate of hospital admissions for diabetes and 11% of deaths in the area were attributed to diabetes. The cost for outpatient department appointments for diabetes was £1.5 million in 2010–11. ‘This was unsustainable, particularly with the rapid increase in the prevalence of type 2 diabetes,’ he pointed out.

'We wanted to create a more cost-effective system that was delivering better outcomes, moving from unplanned to planned care with an integrated diabetes service.
based in the community, and ensuring that all GPs provided the same standard of diabetes care,’ Dr Chamley told the meeting.

The aims were to:
• Improve patients’ experience of care and ensure this was provided closer to home.
• Increase the uptake of structured education.
• Improve health outcomes including better control of blood glucose, blood pressure and lipids; and reduce complications and emergency admissions.
• Provide easier access to specialist care if needed.

The team set up a small community diabetes service team to plan how this could be achieved, including a workshop with more than 100 local diabetes patients facilitated by Diabetes UK.

‘Patients were not that bothered where they received their care but they wanted to see a person who was skilled in managing their diabetes,’ Dr Chamley reported. A small user group of patients helped plan how to make the patient journey into the service as good as possible.

The new community-based diabetes service went live in 2011, providing a wide range of patient care activities in addition to diabetes clinics. These included injectable therapy groups run by diabetes nurses and structured education activities. A key part of the programme was improving primary care so each practice now has an attached diabetes specialist nurse whom they can telephone or email 9am–5pm on weekdays.

In terms of results, Dr Chamley considered the community-based clinics had been ‘almost an over success’. The service has increased from two clinics a week to five per week across four locations.

‘Really importantly, our patients like what we are doing,’ he reported. The number of patients accessing structured education has increased from 400 per year in 2011 to more than 1000 each year. There has been a reduction in emergency admissions in people with diabetes and a total of 700 patients achieved better A1c control between 2011 and 2015. ‘I think this is related to better quality of care from both the community clinics and across the system,’ Dr Chamley concluded.

For further information see: Lambeth Diabetes Intermediate Care Team www.lambethdiabetes.nhs.uk; and Diabetes Modernisation Initiative dmi-diabetes.org.uk.

**Individualise treatment of diabetes**

Treatment of diabetes should be individualised based on each patient’s health needs and personal situation, argued Dr Kevin Fernando, GP and Diabetes Lead from North Berwick, Scotland.

‘Diabetes doesn’t really lend itself to an algorithmic approach to treatment; it really requires an individualised approach,’ he suggested.

The National Institute for Health and Care Excellence diabetes guidance published last December emphasised individualised care. ‘But it also included a rather clunky algorithm,’ he said. He recommended a more individualised approach, taking account of both patient and disease factors, including risks associated with hypoglycaemia, disease duration, life expectancy, comorbidities and complications. ‘For example, if the patient in front of you has a high risk of hypoglycaemia, take your foot off the pedal and adopt a less stringent A1c target.’

To individualise treatment, Dr Fernando suggested the first question to ask is, ‘Why are we treating this person with diabetes? Is it to improve their quality of life, to reduce symptoms such as polyuria, or to extend life expectancy, to prevent microvascular and macrovascular complications, or both?’

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### Figure 1.
The new community-based structure of the diabetes service in Lambeth, South London. (Copyright © Lambeth NHS Diabetes Intermediate Care Team)
The UK Prospective Diabetes Study showed that tight glycaemic control in patients newly diagnosed with diabetes was associated with lower risk of diabetic complications after 10 years’ follow-up. However, the ACCORD, ADVANCE and VADT trials in older patients who had had diabetes for seven to 10 years and had multiple comorbidities, most with established cardiovascular disease, showed that tight glycaemic control did not improve cardiovascular outcomes, and the ACCORD study showed a 22% increase in mortality, leading to the trial being stopped early.

So what are the implications of these findings in clinical practice? ‘In older patients who have had diabetes for some time and who may have established cardiovascular disease, we need to take our foot off the pedal for glycaemic control because of the risk of doing more harm than good. Patients have more to gain from tight blood pressure control,’ Dr Fernando advised. There is a wide range of drugs now available to treat type 2 diabetes, each with a different mode of action and side-effect profile. ‘So the challenge is to match the drug to the individual patient,’ he concluded, adding that this should take account of individual patient preference and characteristics to optimise the management of diabetes.

Turning services upside down to deliver the new care models

‘We are fundamentally turning upside down how services work together to provide care to patients,’ Samantha Jones, Director of New Models of Care with NHS England, told the conference. She warned that the national tariff payment system does not currently provide an incentive to keeping people out of hospital.

‘This will change,’ she said. ‘Governance will change to taking control of hospital admissions. Populations are risk stratified and teams work to ‘wrap care around patients’ rather than patients having to slot into organisation silos.

So far, eight locality teams are working across the region, each including a care coordinator, administrator, community matron, district nurse team, diabetes nurse specialist, heart failure nurse, respiratory nurse specialist, occupational therapist, physiotherapist, mental health nurse specialist, social worker, and self-care specialist. Results so far have shown reduced hospital admissions and cost savings. ‘By 2020, half of the population in England will be covered by these new care models,’ concluded Ms Jones.


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