Diabetes today: missed opportunities, unacceptable variations in care and ‘indescribable tragedy’

Diabetes UK’s new report ‘State of the Nation: Challenges for 2015 and Beyond’ highlights that, while progress has been made in the last few years, there is no room for complacency. There still seem to be marked variations in care, missed opportunities and the tragedy of avoidable diabetes.

Here, Mark Greener reports on the implications of Diabetes UK’s findings, relevant NHS strategies, and current opinion on the way in which care might be improved.

Until insulin’s introduction in 1922, most children with diabetes slipped into fatal comas within a few months of developing the disease. Since then, the prospects for people with type 1 diabetes (TID) have changed almost beyond recognition. For instance, a recent study from Scotland found that 47% of men and 55% of women with TID survived to 70 years of age. This compares to 76% of men and 83% of women in the general population. Estimated life expectancy at 20 years of age for people with TID in Scotland is now shorter by 11.1 years for men and 12.9 years for women.

Nevertheless, a new report from Diabetes UK – ‘State of the Nation: Challenges for 2015 and Beyond’ – underscores that there is no room for complacency. Each year about 20 000 people with diabetes still die prematurely – about one death every half-an-hour. Moreover, while most aspects of care continue to show small improvements, performance in some aspects worsened over recent years. Overall, the report, based on the National Diabetes Audit, paints a picture of missed opportunities, unacceptable variations in care and the ‘indescribable tragedy’ of avoidable diabetes.

‘We have made progress if you compare care to 20 years ago. But the National Diabetes Audit has not shown the kind of improvement one would hope for across most measures over the last few years,’ Robin Hewings, Head of Policy at Diabetes UK, told Practical Diabetes. ‘There are early indications of improvements in paediatrics, and the announcement of a prevention programme for type 2 is exciting. We have also seen isolated examples of improvements in systems. However, we do not see across the country a sense that things are getting significantly better over the last few years.’

The devil’s in the detail

Achieving a good HbA1c is, of course, one key measure of diabetes management – and, in 2012–13, 94% of people with type 2 diabetes (T2D) had the NICE-recommended annual HbA1c check. However, the devil is in the detail. For example, just 81% of people with TID received their annual HbA1c check – a decline since 2010–11 when 86% of people received the check. Moreover, many people have ‘exceptionally high-risk’ glycaemia: 16.7% of those with TID and 6.8% with T2D have HbA1c levels of at least 86mmol/mol (10%).

The report highlights numerous other areas of poor performance. For example, renal failure was the underlying cause of death for 5.7% of men and 6.2% of women with TID in the Scottish study. Renal disease also contributes to cardiovascular disease, which accounted for 45% of deaths in men and 42% of women. In people with preserved renal function (estimated glomerular filtration rates [eGFR] of 90ml/min/1.73m2 or higher), the estimated loss in life expectancy from age 20 years was 8.3 years for men and 7.9 years for women. Mortality rose as renal function declined: relative risks of 1.74 for stage 3 chronic kidney disease, 4.70 for stage 4, and 8.70 for stage 5 compared with preserved renal function. Yet only 57.0% and 81.2% of people with TID in England had their urine albumin and serum creatinine measured, respectively. Meanwhile, the number of people with diabetes requiring renal replacement therapy rose by 95% between 2007 and 2012.

Overall, just 41.4% of adults with TID received all eight NICE-recommended care processes compared to 61.6% of those with T2D (Table 1).

<table>
<thead>
<tr>
<th>Care process</th>
<th>Type 1 diabetes</th>
<th>Type 2 diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c</td>
<td>80.9%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>89.0%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Cholesterol level</td>
<td>78.2%</td>
<td>92.5%</td>
</tr>
<tr>
<td>Serum creatinine</td>
<td>81.2%</td>
<td>93.7%</td>
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<tr>
<td>Urine albumin</td>
<td>57.0%</td>
<td>74.9%</td>
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<tr>
<td>Foot check</td>
<td>72.7%</td>
<td>86.8%</td>
</tr>
<tr>
<td>Body mass index recorded</td>
<td>84.4%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Smoking status recorded</td>
<td>80.0%</td>
<td>86.9%</td>
</tr>
<tr>
<td>All recommended care processes</td>
<td>41.4%</td>
<td>61.6%</td>
</tr>
</tbody>
</table>

Table 1. The percentage of adults with either type 1 or type 2 diabetes who received the NICE-recommended eight care processes during 2012–13, as highlighted in the Diabetes UK report (data based on National Diabetes Audit 2012–13 figures for England)
In particular, younger people were less likely to receive the care processes. For example, in 2012–13, only 12.1% of people aged 12–24 years in England received all seven care processes, although this is approximately double (6.7%) the rate in 2011–12. Smoking status isn’t included in the young person’s process.) Only 29.1% of people with T1D under the age of 40 years received all eight processes compared to 39.9% of those aged 65–79 years and 54.4% of those aged at least 80 years.

Nevertheless, having a process recorded does not guarantee effective care: only 16% of people with T1D and 37% with T2D met all three of the treatment targets for blood pressure, HbA1c and cholesterol. Again, younger people were less likely to attain treatment targets than older patients. Indeed, between 2007 and 2012, the number of several potentially avoidable complications rose significantly, including cardiac failure (by 130%), stroke (106%) and angina (67%).

The report also highlighted marked variations in care between clinical commissioning groups (CCGs) in England. Overall, 27.6% of people with T1D and 65.0% of those with T2D showed HbA1c levels of 58 mmol/mol (7.5%) or under. However, the proportion of people meeting this critical target differed by 30 percentage points between the best and worst performing CCGs. Moreover, the proportion who met all three treatment targets varied by 20 to 30 percentage points between CCGs. In some CCGs, less than 10% of people with T1D met all three targets.

Similarly, since 2013, local authorities have been responsible for implementing the NHS Health Check programme, which could, Diabetes UK claims, prevent 4000 people a year from developing T2D. However, the report notes, 'while many local authorities are making good progress with this, others are not'. Moreover, in England during 2013–14, less than half of people accepted the offer of a health check. Even if they accept the check, 'referral to risk reduction programmes for those identified as high risk is inconsistent'.

A positive spin

Speaking at the report’s launch in a packed room at the Houses of Parliament in January, Secretary of State for Health Jeremy Hunt began by placing a positive spin on the findings. He thanked ‘everyone in the NHS for the huge effort that’s been made over recent years and the progress that we have made’ in tackling diabetes.

Jeremy Hunt praised the finding that up to 60% of people with diabetes now get all eight NICE approved processes, which, he noted, ‘is a 5% improvement on four years ago’. He also welcomed reports that the number of people with undiagnosed diabetes has declined by more than 100,000.

‘Childhood obesity rates have started to fall for the first time in 14 years, which is very encouraging, and there is much wider understanding of the importance of diabetes in the NHS front-line, but particularly in general practice, than there has been in the past,’ Jeremy Hunt added. Finally, he pointed out that the Global Burden of Disease Study of 19 wealthier nations reported that the UK had the lowest number of avoidable deaths from diabetes.3 ‘I think that is a tribute to many people in the NHS who are taking these issues very seriously,’ Jeremy Hunt remarked.

Nevertheless, Jeremy Hunt admitted, ‘there is still a very long way to go, and the care we give people with diabetes and the effort we put into prevention need to improve.’ He noted, in particular, that better care would prevent the ‘vast majority’ of the approximately 100 amputations a week due to diabetes. Indeed, between 2007 and 2012 the number of amputations due to diabetes rose by 60%. ‘We still have shockingly high levels of childhood obesity,’ Jeremy Hunt admitted. One in 10 children enter primary school clinically obese. Two in 10 children leave primary school clinically obese.

Against this background, Diabetes UK argues that the Health and Wellbeing Boards need to support prevention programmes. For example, these boards need to develop strategies that reduce obesity and encourage healthier diets and increased activity. In addition, boards should identify and target people at high risk of T2D and develop prevention pathways.

The hidden burden

The report also draws attention to diabetes’ psychological burden. ‘We have known for a long time that psychology is critical in diabetes,’ Robin Hewings says. In the 1920s, doctors recognised that mental, social and familial problems contributed to marked fluctuations in glycaemia in certain people with diabetes. Some patients also deliberately or subconsciously triggered hypoglycaemia or ketoacidosis to avoid difficult situations at home by ‘escaping’ into hospital.1

Robin remarks that people with diabetes live with a risk of mortality that is up to seven times higher than in the general population for women aged 15–34 years. Furthermore, depression is twice as common in people with diabetes as in the general population. Depression and anxiety (which are also more common in people with diabetes) can undermine self-care and, in turn, worsen glycaemic control.

Therefore, psychological and emotion support is – or should be – an integral part of the structured education offered to people with diabetes. Yet, in 2012–13, only 1.1% of people with T1D and 1.6% of those with T2D attended a structured education programme. Even among people with newly-diagnosed diabetes, only 0.9% and 3.6% of those with T1D and T2D respectively attended the courses. Just the other side of the Thames from Westminster, Lambeth and Southwark have used a variety of approaches to enhance uptake of diabetes education including reminder telephone calls, evening and weekend sessions, shorter courses and education in different languages.

‘Another recent example of best practice – from King’s College London – brought together psychological support with practical help. This produced considerable psychological improvements and enhanced diabetes management,’ Robin remarks. A health economics evaluation is underway. ‘You have to say looking at the clinical outcomes it looks very promising,’ he adds.
‘Psychological intervention may even prove cost saving, which is a pretty high bar to get over.’ However, a recent survey of 3845 people with diabetes found that 68% of people who had needed psychological support had not received it.

A five-year plan
Against this background, the Five Year Forward View, published in October 2014, sets out a vision for the NHS’s future and reflects, Jeremy Hunt remarks, the way in which ‘very important principles’ encouraged by Diabetes UK and others over the years have ‘filtered into the DNA of the NHS’. For example, the Five Year Forward View places a greater emphasis on prevention rather than cure throughout the NHS. ‘Progress on diabetes is in a way a litmus test’ for the rest of the NHS, he said. ‘It is an indescribable tragedy that we allow so many people to become diabetics when we don’t need to.’

The Five Year Forward View also reflects England’s changing demographics, which means that millions of people with long-term health conditions need ‘much better care outside the hospital setting’. ‘The heart of the cultural change that we need within the NHS is that everyone who has a long-term condition should have a doctor who is responsible for them, to make sure they have the right care, to make sure that we prevent them having to go to hospital and to make sure that there is a proper care package in place,’ Jeremy Hunt said.

The Five Year Forward View commits the NHS to providing an evidence-based T2D prevention programme. Diabetes UK says that the programme should include ‘appropriate identification, follow up and interventions for people at high risk’ of T2D. NHS England announced in December that it would establish a national T2D prevention programme in partnership with Diabetes UK and Public Health England.

Closer to the front-line, the report calls for CCGs to set improvement targets and implement diabetes action plans to ensure that patients receive the recommended care processes and attain treatment targets. In addition, CCGs should ensure that health care staff can access continuing professional development (CPD) in diabetes care. For instance, CCGs should, Diabetes UK remarks, incorporate CPD requirements in contracts with service providers.

CCGs should also recognise the importance of specialists in delivering cost-effective diabetes services, including diabetes specialist nurses and multidisciplinary foot care teams: up to 80% of amputations due to diabetes are potentially preventable. However, 28% of people with T1D and 13% with T2D do not receive annual foot checks, a figure that has ‘hardly changed over recent years,’ the report says. In the best performing CCGs, more than 90% of people had their feet checked in 2012–13, compared to just 75% in the worst-performing area.

Almost five years after the White Paper ‘Equity and Excellence: Liberating the NHS’ announced that GPs will take over this commissioning, Robin Hewings notes that the changes are ‘still bedding down’. However, he predicts that CCGs will become more powerful as drivers for change. This should, he suggests, result in further improvements.

Robin stresses the importance of integrating care pathways across primary, community and specialist care and delivering collaborative care planning (CCP). During CCP, patients and clinicians work together to agree goals, develop and implement action plans, and monitor progress. Despite improving the skills and knowledge of patients and professionals, CCP is still not widely used. The report calls for CCGs to explicitly commission CCP, along with the training and support systems.

‘There are examples of good practice from several parts of the country,’ Robin concludes. ‘We need more poorly performing areas to learn from the best. The problem isn’t innovation: there’s plenty of that. It’s getting poorly performing areas to adopt innovations.’

Mark Greener, Medical Correspondent

References