Improving control: Is it worth the effort?

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A new report from the NHS Information Centre (2011) has found that diabetes prescriptions now account for 8.4% of the entire NHS net bill for primary care drugs in England. The percentage increase in the total cost of prescriptions for the condition from 2005/6 to 2010/11 was 41.1%, taking the cost of diabetes prescribing to £725 million in 2010/11. The report also shows that during the same period the number of diabetes prescription items increased by 41%, reaching 38.3 million items in 2010/11 – meaning that one in every 25 prescription items written is now for diabetes (NHS Information Centre, 2011).

We know that the prevalence of diabetes is on the rise and represents one of the major healthcare challenges of the 21st century, and these new figures corroborate this fact. In a strapped-for-cash NHS we have to ensure that treatment is both cost-effective and worth the effort for both the person with diabetes and the healthcare professional.

The UKPDS (UK Prospective Diabetes Study; Holman et al, 2008) demonstrated that a reduction in HbA_{1c} level significantly reduced the risk of microvascular complications in people with type 2 diabetes. Similarly, the DCCT (Diabetes Control and Complications Trial) Research Group (1993) showed a significant reduction in micro- and macrovascular events in people with type 1 diabetes with intensive insulin therapy compared with conventional therapy. However, the ACCORD (Action to Control Cardiovascular [CV] Risk in Diabetes) Study Group et al (2008) reported problems such as hypoglycaemia and cardiac death associated with a rapid reduction in HbA_{1c} level to <6% (<42 mmol/mol) in people with type 2 diabetes. Unfortunately, there is little macrovascular benefit in reducing the HbA_{1c} level to <6.5% (48 mmol/mol) in the individual with type 2 diabetes who has had a long duration of the condition or established CV disease other than where renal or eye disease is present. This has been recognised within the updated Quality and Outcomes Framework (British Medical Association and NHS Employers, 2011) in which it was reported that the HbA_{1c} indicator for established diabetes has increased from <7.0% (<53 mmol/mol) to <7.5% (<58 mmol/mol), and that intensive management targeting an HbA_{1c} level of <6.5% (<48 mmol/mol) be avoided, in order to reduce the risk of hypoglycaemia.

In type 2 diabetes, more CV benefit is gained with aggressive treatment to achieve target blood pressure (BP) and cholesterol levels. The drugs we use to treat BP and cholesterol levels are predominanty generic, therefore, cheaper but cost-effective. In the past 10 years we have seen the launch of numerous blood glucose-lowering agents for people with type 2 diabetes. These agents lower HbA_{1c} levels by approximately 0.7–1.7%, but are dependent on good beta-cell function to be effective. The cost of these newer therapies is in the range of £30–77 per month and will be included within those 38.3 million items prescribed each year.

For any treatment regimen to be effective it depends on the person with diabetes actually taking the medication and taking on lifestyle modifications such as healthy eating principles and increasing activity levels. This is challenging for some, as it means sustained behavioural change in their everyday life, and even if they are able to make such changes, sometimes they still fail to reach the target HbA_{1c} level as a result of reduced beta-cell function. How many of you could make the same changes that we expect our patients to make? ■

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