A vision of the way diabetes care should be delivered

Rowan Hillson

The author is delighted to have the opportunity to share her vision for diabetes care. The author believes that every person with diabetes deserves the highest standards of personalised care, no matter where, when or by whom that care is delivered. Healthcare professionals delivering diabetes care should be properly trained in diabetes and know the boundaries of their knowledge. They should have opportunities to extend those boundaries and keep up-to-date. Also, people who have diabetes and healthcare professionals should have ready access to specialist advice when they need it.

n a perfect world, people at risk of diabetes would be identified early. They would be given prompt, practical, personalised advice about diet, weight management and exercise and be supported long-term. Diabetes would be diagnosed early and managed with a care plan agreed with each individual and tailored to his or her clinical and personal situation. There would be time for people with diabetes to talk with trained, experienced staff and patients' choices would be respected. Individually-tailored information and education following national standards would be readily available at the individual's convenience.

Throughout, health care would disrupt the lives of people with diabetes as little as possible. Treatment would be monitored properly and frequently so that the right medication was provided at the right time, in the right dose and with absolute consideration for safety. Each person with diabetes would have individual treatment goals for each risk factor, starting with national recommendations and tailoring them to be safe, practical and acceptable. Those treatment goals would be adjusted to changing clinical and personal situations as appropriate. The presence

or absence of complications of diabetes would be assessed at least annually and recorded. Everyone with diabetes would have retinal screening or ophthalmological care as appropriate. Complications would be diagnosed and treated promptly, again with care planned and tailored to the individual's needs.

Every person with diabetes would have the mobile phone number of a named, well-informed and well-trained local diabetes contact and a 24-hour expert help-line to cover periods off duty. Every person with diabetes would have access to their accurate, real-time clinical records maintained according to national confidentiality and security requirements as would every healthcare professional treating them. Patient care would be delivered in venues convenient for the person (including parking), providing staff and resources appropriate to the their needs at that particular time in their diabetes journey. Care would not be impeded in any way by organisational or financial boundaries.

Healthcare professionals managing people with diabetes (in or out of hospital) would have relevant, validated, on-going training and practical

Article points

- 1. In a perfect world, people with diabetes would be diagnosed early and managed with a care plan agreed with each individual and tailored to his or her clinical and personal situation.
- 2. We have extensive published clinical evidence on which to base diabetes care, but our patients often differ from those in the studies and no person is "average".
- 3. Diabetes care has improved and primary care must take much credit. The author believes that all of us caring for people with diabetes can work more closely to produce even better care.

Key words

- Audit
- Commissioning
- Improving services

Rowan Hillson is a Consultant Physician and Diabetologist at The Hillingdon Hospital, London, and National Clinical Director for Diabetes.

Page points

- It is a testament to the quality of the diabetes National Service Framework that, 5-years later, it is still considered to be a valid set of standards for diabetes services.
- We need to deliver the NSF in a changing society. Diabetes is increasing in prevalence and placing increasing demands on the NHS.
- 3. We have targets in primary and secondary care some clinical, some time-based. The Quality and Outcomes Framework (QOF) has given us more information, and by embedding standards, aspects of diabetes care have improved.

experience in the management of the condition. They would have access to specialist advice night or day. People needing direct specialist care would get it straightaway.

Healthcare professionals specialising in diabetes within a care area (for example, a PCT district) would form one closely coordinated team (including patient representatives) providing efficient care to national standards and would communicate well and often. Diabetes specialist staff would provide a full range of services for individuals with complex, complicated, or high risk aspects of diabetes care (for example, insulin pump therapy, renal disease, foot disease, paediatric diabetes and preconception or pregnancy). They would train and support other staff.

General practice and specialist practice services would participate in the National Diabetes Audit (NDA) and learn from the results to improve local care. Healthcare professionals caring for people with diabetes should be able to work in ways that provide motivation and job satisfaction and should have the management and administrative support they need to do their jobs properly.

But what is the reality?

In the author's opinion, it is a testament to the quality of the diabetes National Service Framework (NSF; Department of Health [DH], 2001) that, 5 years later, it is still considered to be a valid set of standards for diabetes services. Since its publication there have been undoubted improvements in diabetes care – a reduction in risk factors and retinal screening (the largest such programme in Europe, for example (English National Screening Programme for Diabetic Retinopathy, 2009).

However, we need to deliver the NSF in a changing society. Diabetes is increasing in prevalence and placing increasing demands on the NHS. Every person with diabetes is different. We have extensive published clinical evidence on which to base diabetes care, but our patients often differ from those in the studies — and no person is "average". People who have been newly diagnosed with diabetes may need different risk factor management to those with long-established diabetes or those with irreversible tissue damage.

There are still unanswered questions such as the most appropriate home glucose-monitoring regimen in type 2 diabetes or the best antibiotic regimen for diabetic foot infections.

Boundaries, which work well administratively and financially, may sometimes inadvertently create barriers for patients and professionals. Complexity of administrative systems and "silo working" can fragment care or lead to duplication or omission.

We have targets in primary and secondary care - some clinical, some time-based. The Quality and Outcomes Framework (QOF) has given us more information, and by embedding standards, aspects of diabetes care have improved. Concerns are sometimes expressed about linking clinical targets with financial reward, and that systems such as QOF may inadvertently operate against individually tailored diabetes care. This should not be so. Targets derived from published evidence should be used in national advice but personal targets must be safe and practical for that individual at that time in his or her life. The General Medical Council (GMC, 2006) states that "patients must be able to trust doctors with their lives and health ... you must make the care of your patient your first concern".

There are challenges to face in these changing times but the author feels very encouraged and supported by the extensive enthusiasm that exists with regard to continuing to improve the care of people with diabetes nationwide, for example from organisations such as the Primary Care Diabetes Society. The author is also fortunate that she has the support of NHS Diabetes, the new name for the reinvigorated National Diabetes Support Team, to help her to work with the diabetes community to take forward the diabetes agenda and to support local NHS diabetes clinics to develop their services.

On-going national projects

Audi

Availability of high-quality information is central to improving services, and funding for the NDA has been secured for the next 3 years to enable the audit to be continued and enhanced. The NDA is the largest published clinical audit in the world, now including about 1.5 million

people with diabetes, and the author hopes that participation will continue to increase. Data collected during routine diabetes care is extracted using nationally-agreed confidentiality standards from participating GP practices and hospital episode statistics. Each practice can then review their own data compared with national figures (The Information Centre for Health and Social Care, 2009). It is the author's intention that information from the audit can be used to enable additional effort to be directed to organisations having problems delivering optimal care.

Commissioning

PCTs commission local care for local people. This care must be to national quality standards. The author has asked NHS Diabetes to update the well-used *Diabetes Commissioning Toolkit* (DH, 2006) so that it includes the changes ensuing from *World Class Commissioning* (DH, 2009a) and *High Quality Care for All* (DH, 2008).

NHS Diabetes is working with a wide range of stakeholders to develop the toolkit, and detailed specifications for areas such as diabetic foot care will follow. The toolkit will follow the *Teams without Walls* "model of integrated care where professionals from primary and secondary care work together in teams, across traditional health boundaries, to manage patients using care pathways designed by local clinicians" (Royal College of Physicians et al, 2008).

NHS Direct

No matter how well people manage their diabetes most of the time, emergencies can still occur, and it is key that people have access to the right advice and support out of hours. This is an exciting project that is looking at ways in which NHS Direct can further improve the support they provide for people with diabetes.

Pregnancy

The outcomes of pregnancy in women with diabetes are worse than those of women without diabetes and must be improved (Confidential Enquiry into Maternal and Child Health, 2007). The author is determined that women with diabetes who are likely to become pregnant or who are pregnant, including those with

gestational diabetes, have support that will give them the best chance of giving birth to a healthy baby. To ensure that this happens the author has asked NHS Diabetes to set up a pregnancy working group, and following a successful stakeholder event, the work areas for the project have been identified.

Primary care has a key role to play in improving pregnancy outcomes and by taking a few simple steps could help enormously. For example, it is key that each woman with diabetes of child-bearing age is counselled (if appropriate) about the need to plan their pregnancy at a time of good glucose control and optimal health. Check contraception status before prescribing angiotensin-converting enzyme inhibitors or statins. In addition, please check your practice diabetes register to ensure that you do not have women on these drugs who might become pregnant.

Vascular checks

The national programme to identify people at risk of cardiovascular disease, diabetes or chronic kidney disease started to roll out in April, as part of a 5-year rolling programme (DH, 2009b). People not on cardiac, diabetes or other risk registers aged 40-74 years will be invited for a health check. The check will consist of simple questions and measurements about age, gender, smoking, medication and family history, post code, blood pressure and BMI, and blood tests for cholesterol and fasting glucose or random HbA_{1c} level checks. Everyone will receive individual risk reduction advice, those at higher risk will have more intensive management, and those diagnosed with medical conditions, for example diabetes or hypertension, will be referred for treatment. It is estimated that these measures will prevent at least 4000 people a year developing diabetes (DH, 2009b).

Diabetes in hospital

The care of people with diabetes who are in hospital is an area where we are making good progress but where there is still room for improvement.

Following the publication of documents from the National Diabetes Support Team (2008)

Page points

- 1. No matter how well people manage their diabetes most of the time, emergencies can still occur, and it is key that people have access to the right advice and support out of hours.
- 2. This is an exciting project that is looking at ways in which NHS Direct can further improve the support they provide for people with diabetes.
- 3. The author is determined that women with diabetes who are likely to become pregnant or who are pregnant, including those with gestational diabetes, have support that will give them the best chance of giving birth to a healthy baby.
- 4. The national programme to identify people at risk of cardiovascular disease, diabetes or chronic kidney disease has started to roll out this month, as part of a 5 year rolling programme.

Page points

- We need to develop our diabetes specialists. Good specialist leadership should be at the core of any diabetes service.
- One of the author's priorities is to tackle the inequalities that exist in diabetes care.
- 3. A group of experts met recently to look at the way the condition affects different groups of people, such as those from different ethnic backgrounds and social classes, older people and young people, and also the variations in the way that different groups are able to access services.
- 4. Our aim must be to improve the health and wellbeing of everyone with diabetes we see.

and the NHS Institute for Improvement and Innovation (2008), NHS Diabetes is liaising with the Joint British Diabetes Societies (JBDS) inpatients working group. Their current work areas are foot care (the initial project was sponsored by Diabetes UK with JBDS), acute coronary syndrome, quality standards, diabetic ketoacidosis, hypoglycaemia and perioperative care. As well as aiming to improve care and experience for people with diabetes admitted to hospital, the project hopes to work with primary and community care to reduce diabetes emergencies (and hence admissions) and facilitate appropriate discharge and follow-up.

Specialist training in diabetes

We need to develop our diabetes specialists. Good specialist leadership should be at the core of any diabetes service. Earlier this year, the Association of British Clinical Diabetologists and the Young Diabetologists Forum with Community Diabetes Consultants ran a successful course for specialist diabetes registrars in community diabetes. The popular King's Fund courses continue to provide training for young diabetologists.

Change in HbA_{1c} measurement

There is an imminent change in the measurement of HbA_{1c} levels from the percentages used in the Diabetes Control and Complications Trial (DCCT Research Group, 1993) to International Federation of Clinical Chemists (IFCC) mmol/mol. These measurements will take time to adjust to, and NHS Diabetes has been working with stakeholders to develop user-friendly guidance for all those likely to be affected by the change. The change is likely to occur later this year and results will be dual reported for some time. Examples of new values are: HbA_{1c} (DCCT vs. IFCC) 6% = 42 mmol/mol; 7% = 53 mmol/mol; 9% = 75 mmol/mol.

Equality

One of the author's priorities is to tackle the inequalities that exist in diabetes care. A group of experts met recently to look at the way the condition affects different groups of people, such as those from different ethnic backgrounds and social classes, older people and young people,

and also the variations in the way that different groups are able to access services. At this meeting, the author was struck by the tremendous amount of work that is already being done all around England. Over the coming weeks, the group will be developing a strategy and identifying areas where support can be offered.

Conclusion

The author is very aware that to achieve all facets of the vision is a counsel of perfection and must be tempered by the real world. Diabetes care has improved and primary care must take much credit.

The author believes that all of us caring for people with diabetes can work more closely to produce even better care. Our aim must be to improve the health and wellbeing of everyone with diabetes we see.

Confidential Enquiry into Maternal and Child Health (2007)

Diabetes in Pregnancy: Are we Providing the Best Care? Findings
of a National Enquiry. CEMACH, London. Available at: http://
tiny.cc/x5ENQ (accessed 01.04.09)

Department of Health (2001) National Service Framework for Diabetes: Standards. DH, London. Available at: http://tiny.cc/wDrzF (accessed 01.04.09)

Department of Health (2006) *Diabetes Commissioning Toolkit*. DH, London. Available at: http://tiny.cc/0rLaS (accessed 01.04.09)

Department of Health (2008) High Quality Care for All: Next Stage Review Final Report. DH, London. Available at: http://tiny.cc/fbUut (accessed 01.04.09)

Department of Health (2009a) World Class Commissioning. DH, London. Available at: http://tiny.cc/o3GTl (accessed 01.04.09)

Department of Health (2009b) Vascular Checks Programme: sharing the learning from implementing vascular checks. DH, London. Available at: http://tiny.cc/VTWXU (accessed 01.04.09)

Diabetes Control and Complications Trial Research Group (1993)

The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. N Engl J Med 329: 977–86

English National Screening Programme for Diabetic Retinopathy (2009) Available at: www.retinalscreening.nhs.uk (accessed 01.04.09)

General Medical Council (2006) Good Medical Practice. GMC, London. Available at: http://tiny.cc/mYOcW (accessed 01.04.09)

National Diabetes Support Team (2008) Improving Emergency and Inpatient Care for People with Diabetes. NDST, Leicester. Available at: http://tiny.cc/WU0Z6 (accessed 01.04.09)

NHS Institute for Improvement and Innovation (2008) Focus
On Inpatient Care for People with Diabetes. NHS Institute for
Improvement and Innovation, Coventry. Available at: http://
tiny.cc/5CnjQ (accessed 01.04.09)

Royal College of Physicians, Royal College of General Pracitioners, Royal College of Paediatrics and Child Health (2008) *Teams Without Walls. The Value of Medical Innovation and Leadership.* RCP, London. Available at: http://tiny.cc/VwiWx (accessed 01.03.09)

The Information Centre for Health and Social Care (2009) National Diabetes Audit. The Information Centre, London. Available at: http://tiny.cc/0pIjD (accessed 01.04.09)