

# We know what to do, so why aren't we doing it?

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## 'Tell mummy when the big red bus comes'

Imagine having such poor vision that you have to rely on your toddler to 'tell mummy when the big red bus comes'. This patient had had diabetes for most of her life and it had damaged most of her body. I felt sad but I also felt angry. How could this have happened?

Of course, diabetes care cannot prevent complications in every patient, but surely we could prevent much of the tissue damage that blights our patients' lives. We have a huge evidence base for good diabetes care.

It was with this vision that the NSF was launched in 2003. I was delighted that the Cinderella of diabetes was finally coming to the ball. It never occurred to me that one day I would be responsible for helping to deliver this NSF nationally.

Throughout the country healthcare professionals have struggled for years with the rising tide of diabetes. There is great expertise. There are many champions for different aspects of diabetes care. And there are many diabetes healthcare professionals working tirelessly and unsung. The Diabetes Tsar is one of a cast of thousands and cannot deliver anything alone. I worked with a Department of Health team, and with NHS Diabetes whose priorities I set.

In one sense, the challenge is simple – we know what to do, so why aren't we doing it? In reality the challenge is immense. In 2013, the NHS had 1.364 million staff including 147,087 doctors and 371,777 qualified nursing staff.<sup>1</sup> These staff have variable training and expertise in diabetes and care for millions of patients in thousands of healthcare settings. Healthcare resources are always under pressure.

## Information

The key to improvement is good information. The NDA is the world's largest clinical audit – combining data from primary and secondary care. It started in 2003 and now includes over 2 million patients. One of my key roles was continually to champion the NDA and work with the audit team to ensure its survival. The NDA was successfully recommissioned. Other audits are the NPDA, the NaDIA, the National Pregnancy in Diabetes Audit, the

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*Br J Diabetes Vasc Dis* 2014;**14**:128-130  
<http://dx.doi.org/10.15277/bjdv.2014.043>

## Abbreviations and acronyms

NaDIA	National Diabetes Inpatient Audit
NCD	National Clinical Director
NDA	National Diabetes Audit
NDIS	National Diabetes Information Service
NPDA	National Paediatric Diabetes Audit
NSF	National Service Framework for Diabetes

Diabetes Foot care Audit, and the Patient Experience of Diabetes Services Audit.<sup>2</sup>

The NDIS<sup>3</sup> was conceived by my predecessor and colleagues. It is a wonderful resource and I was proud to chair the NDIS partnership board. When I wrote a diabetes book in 2007/8 it was hard to find data. For the second edition (out March 2015) it was much easier.

## Primary care

The NDA provides a rigorous review of risk factor management and outcomes in primary care. Care has improved since 2003 but the rate of improvement has slowed. Every aspect is important. It was particularly worrying that urinary microalbumin testing was underused and I, with many others, highlighted this repeatedly.

Microalbumin testing rose from 72.3% in 2009-10 to 76% in 2011-12. Yet overall achievement of treatment targets improved only slightly from 19.3% in 2009-10 to 20.8% in 2011-12.<sup>4</sup> A GP-led NHS Diabetes team took NDA data to GP practices in poorly-performing areas. Much more needs to be done.

## Children and young people

In 2008, the Chief Medical Officer asked me how many children have diabetes. I was ashamed that I didn't know. No-one else did either. So I commissioned a survey that found 22,783 children and young people with diabetes in England.<sup>5</sup>

In 2008, 13,021 children with diabetes were audited. Just 4% had received all essential care processes.<sup>6</sup> So one of my first decisions was to pump-prime and help consolidate regional paediatric diabetes networks. NHS Diabetes and the dynamic paediatric diabetes community delivered this. There is now a best practice tariff for paediatric diabetes.

In 2011-12 NPDA audited 25,390 records and 6.7% had had the essential care processes<sup>7</sup> - an improvement despite near doubling of patients audited. There is still a long way to go.

## Diabetes in hospital

A person with diabetes should expect exemplary diabetes care in hospital, and may, indeed, receive this. But they may not.<sup>8</sup>

I was determined to build on the good work already being done, and to uncover areas for improvement. The expert development and delivery of the NaDIA and the enthusiastic participation exceeded everyone's expectations.

NaDIA found that 15% of hospital beds in England are occupied by people with diabetes. Shockingly, in 2010, 44.5% of diabetic in-patients had at least one error in their glucose-lowering medication. By 2013 this had fallen to 37.0% (still too high). In particular, prescribing errors in Type 1 patients fell from 42.2% to 28.3%.<sup>9</sup>

Wanting to know the worst, I commissioned a detailed survey of inpatient mortality. There were 10,169,003 hospital admissions between 2010-12 among whom 11.2% had recorded diabetes, but 21.5% of inpatient deaths occurred in this group. After adjustment for case mix, hospital admissions in patients with recorded diabetes had a 6.4% greater risk of dying (2052 more deaths over 2 years) than would be expected compared with similar patients without recorded diabetes. The additional risk of death was significantly greater in smaller trusts.<sup>10</sup>

### Safe use of insulin

Insulin errors have been recognised ever since the 1920s when few people used insulin. In 2013-14, of the 45.1 million glucose-lowering and glucose-testing items prescribed by GPs, 6.5 million were insulin items with a net ingredient cost of £328.3 million. Overall, diabetes items cost £803.1 million and accounted for 9.5% of the total cost of prescribing.<sup>11</sup>

A diabetologist bravely told me of a patient who died after an insulin error. Armed with this example I brought together all the key organisations and insisted upon action. This led to a National Patient Safety Agency Rapid Response Alert in 2010<sup>12</sup> and the safe use of insulin campaign building on the many existing initiatives.

NHS Diabetes, the Leicester diabetes team, and colleagues worked with Virtual College to create the Safe Use of Insulin e-learning course – recently updated. There are other modules.<sup>13</sup> Since 2010 over 100,000 healthcare professionals have registered for training.

### Pregnancy in diabetes

In 2008, participants at an open space event about pregnancy in women with diabetes highlighted the need for an audit. So a team of expert enthusiasts, some of whom were already running regional audits, agreed a data set and achieved national approval (rarely granted first time). NHS Diabetes funded a successful pilot and the National Diabetes in Pregnancy Audit has just collected the first data. The results are due to be published soon.

### The future?

With so many healthcare professionals dedicating some or all of their professional lives to diabetes in this country, I believe that patient care will continue to improve.

Internationally, the UK punches well above its weight in diabetes research. This will continue to help improve both our



### Key messages

- The NDA and other audits are international exemplars. They have shown that providing local data with national comparators can drive improvement
- Although the data do show progress, it is slow. We must continue to improve diabetes care

understanding of diabetes and patient care.

Clinicians caring for people with diabetes should take every opportunity to ensure that everyone involved in any aspect of healthcare, local or national, knows about diabetes and how devastating this condition can be for the individual and for the nation without proper care.

It is worrying that young doctors are less likely to choose Diabetes and Endocrinology as a career. It is astonishing that medical, nursing and other healthcare students have so little training in diabetes, despite it affecting 7.9% of those aged >16 years in England, for example.<sup>14</sup> This must improve.

The NDA and other audits are international exemplars. They have shown that providing local data with national comparators can drive improvement. The next step is for the NDA to include data on medication. The potential learning is vast. It could even help answer the questions about diabetes drugs and cancer. Funding should be found forthwith!

I pursued many challenges as NCD – but never alone. I would like to thank everyone who worked with me from all over the country (and abroad) for the amazing work that they did and still do. There are too many of you to thank individually. You know who you are.

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## Diary

### 2015

#### 12 January

Obesity Update 2015. Society for Endocrinology and Association of Physicians Specialising in Obesity UK. Royal College of Physicians, St Andrews Place, London NW1 4LE. <http://www.endocrinology.org/meetings/2015/ou2015/index.aspx>

#### 29-30 January

Oxford new investigators course. For NHS clinicians in diabetes, endocrinology and metabolism. Oxford Centre for Diabetes, Endocrinology and Metabolism (Headington, OX3 7LE) and Green Templeton College (Norham Gardens, OX2 6PS), Oxford. <http://youngdiabetologists.org/events/326-emerging-experts-2015>  
To register email [Jyothis.George@dtu.ox.ac.uk](mailto:Jyothis.George@dtu.ox.ac.uk)

#### 11-12 February

Mongenetic diabetes symposium: Monogenic Diabetes - Right diagnosis, right treatment. RILD Building, RD&E Hospital Wonford, Barrack Road, Exeter, EX2 5DW. [http://store.exeter.ac.uk/browse/extra\\_info.asp?compid=1&modid=2&deptid=42&catid=51&prodid=775](http://store.exeter.ac.uk/browse/extra_info.asp?compid=1&modid=2&deptid=42&catid=51&prodid=775)

#### 11-13 March

Diabetes UK Professional Conference, ExCeL Centre, Royal Victoria Dock, 1 Western Gateway, London E16 1XL, UK. [www.diabetes.org.uk/conference](http://www.diabetes.org.uk/conference)

#### 12-14 March

5th World Congress on Controversies to Consensus in Diabetes, Obesity and Hypertension (CODHy); Hilton Istanbul Bomonti Hotel & Conference Center, Silahsor Cas. No: 42 Bomonti-Sisli, Istanbul, 34381, Turkey. <http://www.codhy.com/2015/Default.aspx>

#### 11-12 April

World Congress on Angiogenesis. Worlds collide: oncology, ophthalmology, cardiology & wound care. Revere Hotel Boston Common, Boston, Massachusetts, USA. <http://angioworldcongress.com/>

#### 15-18 April

8th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy. Berlin, Germany. <http://www.comtecmed.com/dip/2015/>

#### 23-24 April

ABCD Spring Meeting held jointly with WEDS (Welsh Endocrine and Diabetes Society), Hilton Cardiff

#### 8th May

Joint Midlands Endocrine and Diabetes Clubs meeting. National Motorcycle Museum, Birmingham, B92 0EJ. For information email [E.Collier@bham.ac.uk](mailto:E.Collier@bham.ac.uk)

#### 5-9 June

ADA 75th Scientific Sessions, Boston Convention and Exhibition Center, Boston, MA, USA. [http://professional.diabetes.org/Congress\\_Display.aspx?TYP=9&SID=750&CID=93229](http://professional.diabetes.org/Congress_Display.aspx?TYP=9&SID=750&CID=93229)

#### 14-18 September

EASD 51st Annual Meeting. Stockholm International Fairs – Stockholmsmässan, Stockholm, Sweden. <http://www.easd.org/>

#### 30 November – 4 December

IDF World Diabetes Congress 2015. 1055 Canada Pl, Vancouver, BC V6C 0C, Canada. <http://www.idf.org/worlddiabetescongress>

#### If you are looking for a specific date, sub-specialty or place for conference, one of the following sites might help –

Royal College of Physicians of Edinburgh Symposia 2014-15. For full details visit the College website. <http://events.rcpe.ac.uk/>  
<http://www.doctorsreview.com/meetings>  
<http://www.endocrinology.org/meetings/world.aspx>  
<http://www.continuingeducation.net/schedule.php?profession=Physicians>  
<http://www.esa-hormones.org/meetings/World.aspx>  
<http://www.medical.theconferencewebsite.com/conferences/endocrinology-and-diabetes>