

Specialist diabetes inpatient teams cost-effectively improve care



Anna Morton

People with diabetes account for 15% of inpatients in England – and one in three experience at least one medication error while in hospital. Individuals with diabetes who are admitted for routine surgery stay on average 2.6 days longer than those who do not have diabetes (NHS Diabetes, 2011a). It is estimated that prolonged stays in hospital among people with diabetes result in about 80 000 bed days per year (NHS Diabetes, 2011b). The *National Diabetes Inpatient Audit 2010* found that “there is cause for concern about the care of inpatients with diabetes in most hospitals” (NHS Diabetes, 2011a).

The case for change is both astounding and of immediate concern. The magnitude of what we are facing is the reason why, as the Director of NHS Diabetes, I chose to commission a significant piece of research. Titled “*Inpatient Care for People with Diabetes – The Economic Case for Change*” (NHS Diabetes, 2011b), the report found that the NHS in England spends more than £2.3 billion a year on inpatient care for people with diabetes; that is 11% of NHS inpatient care expenditure. About £600 million of this outlay is estimated to be excess expenditure on diabetes – that is, over and above the sum spent on a population of the same age and gender without the condition; inpatient care for someone with diabetes costs the NHS 35% more a year than care for someone of the same age without diabetes.

In spite of these high levels of expenditure, the report showed that diabetes inpatient care is poor in many areas. Also, significantly the research presented evidence that showed that specialist diabetes inpatient teams can

improve outcomes for patients and generate savings that substantially outweigh the cost of such teams.

Clinical studies summarised by the report suggest specialist diabetes inpatient teams can improve patient outcomes, reduce length of stay, increase day case rates and reduce the number of admissions. The report provides yet further evidence of the contribution DSNs can make; by getting care right first time, such as good foot care and medicine management, it is possible to bring about positive change.

The cost savings and improvements to care highlighted are based on local examples. Derriford Hospital, Plymouth, made annual net savings that are estimated at £207 000 following the introduction of a specialist nurse team. The hospital reduced emergency admission bed days for people with diabetes by around 1129 days a year and elective admission bed days by around 762 days a year (NHS Diabetes, 2011b).

Other improvements that came on the back of introducing specialist care highlighted by the report included:

- In 2006, a study at New Cross Hospital, Wolverhampton, showed the number of inpatients with diabetes fell by 35% after the introduction of an outreach team.
- In 2010, Portsmouth Hospitals NHS Trust reported that the percentage of patients with good glucose control rose from 42% to 70% after the introduction of a specialist diabetes service. Mean length of stay fell from 14.9 to 13.8 days. Readmission rates fell in all parts of the hospital covered by the team.
- A multidisciplinary team at Sheffield Teaching Hospitals NHS Trust reduced harm events by 26.2%.

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Challenges ahead

So the economic case has been made and the message is crystal clear; invest in specialist diabetes and you improve care and save money. The challenge now is to get that message across to those able to influence the local and national funding and policy decision-makers, as well as the decision-makers themselves.

At NHS Diabetes we have been helping inpatient diabetes teams make that case. We manage a series of professional networks to ensure effective two-way sharing of the most up-to-date guidance, tools, best practice and resources. Led and supported by experts working in frontline diabetes services, the networks promote innovative and proactive approaches and resources to improve quality and cost-effectiveness. We have been using our national inpatient network to communicate the findings of the health economic research.

Additionally, on the back of the first ever study into mortality from the National Diabetes Audit (NHS Information Centre, 2011), NHS Diabetes has also been working with some of the poorest performers identified from the report to raise standards. The research found up to 24 000 people with diabetes are dying in England each year from causes that could be avoided through better management of their condition. This has provided us with further useful evidence in making the case.

We have invested significant efforts into supporting diabetes teams trying to influence important local decisions; however, our scope has not been limited to this role. NHS Diabetes is also raising awareness of insulin safety and providing training to frontline staff with our free e-learning module, which has seen almost 80 000 frontline healthcare staff register in just under 2 years (NHS Diabetes, 2012a).

In May 2012 we launched our “safe use of insulin” poster campaign across acute trusts in England. Every hospital trust was sent a resource pack containing posters, a “USB stick” packed with information, pens and sticky notes to encourage staff to complete our “safe use of insulin” e-learning module

(NHS Diabetes, 2012a). We called on diabetes teams in hospitals to promote the module and encourage their colleagues who were not specialised in diabetes to sign up for and complete the training.

To complete a busy agenda, NHS Diabetes is staging the first ever national “hypo awareness week” from 13–19 August, which aims to raise awareness and in turn reduce incidents of hypoglycaemia in secondary care. Trusts in England will be encouraged to hold activities and training, ensure they have fully-stocked “hypo boxes” on their wards and that all staff (including receptionists) are aware of the symptoms of a hypoglycaemic event and what to do in the event of one. A pack of materials is being compiled and will be sent to trusts electronically, containing items including articles prepared for trust newsletters, presentations and screensavers. Invitations to take part will shortly be sent to every acute hospital. The timeframe has been designed to coincide with the launch of the NHS Diabetes “hypo” e-learning module in July (NHS Diabetes, 2012b) and to help prepare hospital teams for the 2012 National Diabetes Inpatient Audit in September.

Since the first *National Diabetes Inpatient Audit* launched in 2009, NHS Diabetes has been building up a strong evidence base, and plenty of activity has been taking place to get the message across. However, more work needs to be done to further the argument for the investment in, and protection of, specialist diabetes teams. NHS Diabetes will be continuing these efforts; please do contact us, by emailing enquiries@diabetes.nhs.uk, if you need any support in furthering a cause shared by the entire diabetes community. ■

NHS Diabetes (2011a) *National Diabetes Inpatient Audit 2010*. Available at: <http://bit.ly/xPJGpG> (accessed 16.07.12)

NHS Diabetes (2011b) *Inpatient Care for People with Diabetes: The Economic Case for Change*. Available at: <http://bit.ly/wrmKZI> (accessed 16.07.12)

NHS Diabetes (2012a) *Safe Use of Insulin: e-learning Module*. Available at: http://www.diabetes.nhs.uk/safe_use_of_insulin/ (accessed 16.07.12)

NHS Diabetes (2012b) *Safe Management of Hypoglycaemia: e-learning Module*. Available at: <http://bit.ly/LSIGJy> (accessed 16.07.12)

NHS Information Centre (2011) *National Diabetes Audit Mortality Analysis 2007–2008*. Available at: <http://bit.ly/Jxuz6E> (accessed 16.07.12)