DiabetesDIGEST
The easy way to stay up to date with developments in diabetes

Editorial

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Ending insulin prescribing errors in hospitals

"Status quo, you know, is Latin for 'the mess we're in'."
Ronald Reagan

Unlike British weather, some things are predictable. At this time of year, the only subject in town for NHS Diabetes is the forthcoming National Diabetes Inpatient Audit. This area of diabetes care has, quite rightly, become a big deal – although, as highlighted by the debate in this issue of *Diabetes Digest* (pages 226–7), data on the number of people admitted to hospital with known diabetes still appear to be an underestimate.

In the 2010 National Diabetes Inpatient Audit (NHS Diabetes), at least 15% of hospital beds were occupied by people with diabetes and, unfortunately, the length of stay for these people was longer than for their counterparts without diabetes (www.nelm.nhs.uk). Almost 70% of people with diabetes admitted to hospital were not seen by the hospital specialist diabetes team, and less than one-third of this group had their feet examined during their inpatient stay. Let's hope that this year's National Diabetes Inpatient Audit shows improvement – unlike the counterpart document, the National Diabetes Audit (NHS Information Centre, 2011), where figures for the achievement of national HbA_{1c} indicators among people with type 1 diabetes have remained unaltered (and grim) since at least 2006.

At *Diabetes Digest* we are proud to have played a small part in rejuvenating interest in inpatient diabetes care by launching the annual National Diabetes Inpatient Conferences back in 2006 (this year's event is to be held on 13 December 2011 in London, see pages 190–1 for more information). Since then, interest in hospital-based diabetes care has mushroomed and we have been delighted to see the publication of guidelines covering key areas of care, including the management of diabetic ketoacidosis in adults (Joint British Diabetes Societies Inpatient Care Group, 2010), diabetic foot care (NICE, 2011) and also guidance on perioperative care and elective procedures (NHS Diabetes, 2011).

One area of inpatient diabetes care needing urgent improvement is the unacceptably high frequency of insulin prescription errors. Last year, the National Diabetes Inpatient Audit (NHS Diabetes, 2010) reported that 37% of prescription charts for diabetes medicines contained at least one prescription error. This figure is not only worrying for people with diabetes and clinicians; hospital managers will know that, soon, insulin prescription errors will become "never events" (Department of Health, 2011), and their occurrence may incur major financial penalties for trusts. Elsewhere, myself and colleagues (Sims et al, 2010) have suggested that it might be more meaningful to use the consequences of these errors as a grading system for risk assessment, rather than the prescription errors *per se*.

The question is: what can be done to reduce the risk of insulin errors in hospitals? Various suggestions have been put forward, including a national prescription chart to be used in all NHS hospitals, or greater encouragement of self-management of diabetes by inpatients. The question is also whether there is the enthusiasm for a more radical solution, such as the rationing of available formulations for people being prescribed insulin for the first time or as a temporary measure while in hospital? Whatever the means, the ultimate aim must be to reduce the potential for medicines and dose confusion among non-specialist staff and junior doctors.

A common insulin dosing problem encountered by inpatients with diabetes is the miss-timed injection of bolus insulin in relation to ward meal times (Campbell and Braithwaite,

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2004). Although self-administration of insulin could potentially reduce the burden of this problem, there would still be a large proportion of inpatients with diabetes in whom insulin self-administration would not be an appropriate option, such as those having insulin on a temporary basis or those with significant cognitive impairment.

Junior doctors are notoriously challenged by prescribing and adjusting insulin doses, especially at weekends (Cox and Ferner, 2009). In these circumstances, technology could help, now that we have bolus calculators available for mealtime insulin dose adjustment. Such a device could be preset by the specialist diabetes team to include a correction dose for the prevailing blood glucose level based on agreed targets and a simple insulin sensitivity factor based on two or three categories for BMI (and, indirectly, insulin sensitivity). The insulin dose would be suggested and given as the blood glucose level is checked when the meal arrives. The device would keep a log of glucose levels, insulin dose and prescriber details.

Some of these options may be perceived by some as a step too far. However, given the potential seriousness of hospital insulin errors, the *status quo* is not an option.

Many thanks and good luck

This edition of *Diabetes Digest* is the last with Dr Colin Close as Nephropathy Digest Section Editor. Colin has stepped down from the editorial board to focus on other projects. Colin wrote the first of his many insightful commentaries for the journal in the winter of 2007. Many thanks go to Colin for his valuable contribution to the journal, we wish him all the best. ■

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