



David Kerr
Editor

Inpatient insulin: Keeping an eye on intensiveness and intricacy

'Refuse to be ill. Never tell people you are ill; never own it to yourself. Illness is one of those things a man should resist on principle.' – Edward Bulwer-Lytton

Hospitals are dangerous places. With superbugs, dirty wards, punctilious bureaucrats and the exponential rise in Struldbruggs (Kerr, 2003), I try to avoid them. Unfortunately, for people with diabetes this is not an option as evidence suggests that at any one time up to 26% of beds are occupied by individuals with the condition (Umpierrez et al, 2002).

Whatever the reason for hospital admission, there appears to be a vogue to use more and more intensive insulin regimens in order to achieve tight glycaemic control to improve clinical outcomes. Although there is clearly benefit in specific areas, such as intensive care units, for the use of intensive regimens, there is a paucity of evidence to support more widespread introduction (Bryer-Ash and Garber, 2005; Inzucchi and Rosenstock, 2005). Therefore, it would make sense to encourage hospitals planning to introduce these diabetes treatment regimens to do so as randomised clinical trials wherever possible. For those units without the resources and infrastructure to set up clinical trials, it would be prudent to set up a system of prospective audit at the outset.

This brings up the question of measurable outcomes. A core set may include:

- mortality
- unexpected disease-related complications
- length of stay
- frequency of hypo- and hyperglycaemia
- use of intravenous insulin infusions
- costs.

Bryer-Ash M, Garber AJ (2005) Point: Inpatient glucose management: the emperor finally has clothes. *Diabetes Care* **28**(4): 973–5

Inzucchi SE, Rosenstock J (2005) Counterpoint: Inpatient glucose management: a premature call to arms? *Diabetes Care* 2005 **28**(4): 976–9

Kerr D (2003) Of Struldbruggs, sugar, and gatekeepers: a tale of our times. *BMJ (Clinical Research Ed)* **327**(7429): 1451–3

Umpierrez GE, Isaacs SD, Bazargan N, You X, Thaler LM, Kitabchi AE (2002) Hyperglycemia: an independent marker of in-hospital mortality in patients with undiagnosed diabetes. *The Journal of Clinical Endocrinology and Metabolism* **87**(3): 978–82

However, at a practical level, this change of emphasis for inpatients with diabetes will invariably increase the risk of potentially serious events as less well-trained staff will be expected to become involved with increasingly intricate insulin regimens. Such events are likely to include prescribing errors – the wrong insulin, the wrong dose, missed doses, delays in giving subcutaneous insulin after stopping intravenous infusions, incomprehensible algorithms for dose adjustments, and discharging people on multiple daily injections when they do not need them. Data on these will also need to be captured. Some form of national agreement on outcomes would certainly allow for meaningful comparisons between institutions and also help in the call for increased investment in those centres doing less well.

Being in hospital is rarely a pleasant experience and, nowadays, increasing numbers of prospective patients are fearful about admission. For people with diabetes, perhaps the time has come for the diabetes team to 'consult' on all patients with diabetes admitted to hospital rather than be asked to look after wards of people that no other speciality is interested in (Kerr, 2003).