Letter: Safety concerns regarding switching to once-daily basal insulin

To the Editor.

I write to share my concerns regarding the article How to switch from twice-daily to once-daily insulin (Down, 2020). There are several reasons why I have concerns:

- The article does not seem to be peer-reviewed or evidence-based.
- Changing insulin regimens to reduce visits on its own is not a clinical reason

 even in times of a pandemic a clinical assessment should be made, and should not be a hasty decision.
- It is not clear who would be deemed competent to carry out a review of insulin – many community staff do not know or understand the profiles over the dozens of insulin formulations available.
- In my experience and other evidence which has been published many elderly patients have hypos on the basal insulins, and these are often not picked up if blood glucose testing is only once daily. This was what I found when doing a 9-month project, working directly with community nursing teams, and has been published in the *British Journal of Community Nursing* (Gregory, 2019).

- Hypoglycaemia is not mentioned as a risk at all just HbA_{1c}, which is an
 average and does not identify the hypoglycaemia risk.
- I particularly would like to see the evidence for the statement "It might be more appropriate and safer to use a once-daily basal regimen" (top right-hand box). There have been other articles published, but these also make it clear that close monitoring is required something that does not happen on a once-daily regimen.

Unfortunately, because of the way the article is written, I fear that this may give the green light for everyone to be switched to once-daily insulin without careful clinical consideration, and that is very unsafe practice.

Yours sincerely,

Sarah Gregory

Clinical Lead, Community Diabetes Team, Medway Community Healthcare

Publisher's response

Dear Sarah,

Thank you for your email and for raising these important concerns. We hope the explanations below will help to reassure you and our readers.

Clinical rationale

We disagree that reducing the number of face-to-face visits is not a valid clinical reason. Given that people with diabetes face an increased risk of poor outcomes of COVID-19 infection, all efforts to reduce the number of contacts and the resultant risk of contamination, where possible, are of great importance.

Evidence base

It is true that there is limited supporting evidence for this practice in the published literature; however, the advice, which was peer-reviewed, is based on the experience of the author and other experts in diabetes care for older and frail individuals. This algorithm has been used in the author's diabetes service for a number of years, with positive results as detailed in this journal (Down, 2019). It has also been used successfully elsewhere in the country. We aim to publish more evidence soon; however, the need – and demand – for a pragmatic guide sooner rather than later, given the ongoing pandemic, has compelled us to publish the advice first.

Hypoglycaemia

We agree on the importance of reducing the risk of hypoglycaemia and do

state as such in the introduction. Indeed, as this advice is primarily targeted at older and frail patients in care and residential homes, the assumption was that avoiding hypoglycaemia would be the principal goal of treatment. While HbA_{lc} is used to determine the starting dose of the new once-daily basal insulin, the algorithm then states that blood glucose monitoring will be required to determine further dose adjustment.

In the author's experience, and in a case series recently published in this journal (Rowney and Lipscomb, 2019), once-daily use of the ultra-long-acting insulins has improved both the risk of hypoglycaemia and glucose variability, whilst also achieving an ${\rm HbA}_{\rm lc}$ that is more appropriate for older, frail patients.

Competencies

Finally, we acknowledge your point that the healthcare professional needs to have the training and competency to carry out a review of insulin regimens. Where this was previously assumed by the author, it has now been stated specifically in an updated version of the advice (available here), and the previous version has been removed.

Yours sincerely,

Su Down; on behalf of the Publisher

References

Down S (2019) Service update: The success of District Nursing virtual clinics in Somerset. <u>Journal of Diabetes Nursing</u> 23: IDN066

Down S (2020) COVID-19: How to switch from twice-daily to oncedaily basal insulin. *Journal of Diabetes Nursing* 24: JDN122 Gregory SJ (2019 Housebound patients with diabetes needing support with insulin—a project to improve service standards. Br.J.Community.Nurs 24:388–91

Rowney J, Lipscomb D (2019) Innovative use of a flash glucose monitor in frail elderly patients: A case series. *Journal of Diabetes Nursing* 23: JDN078 Citation: Gregory S (2020) Letter: Safety concerns regarding switching to once-daily basal insulin. *Journal* of Diabetes Nursing 24: JDN132