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**Response to Thomas RL and Pettus JH, Commentary in
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Manuscripts

Response to Thomas RL and Pettus JH, Commentary in Diabetes Care, Dec 2025

Running head: Measuring Impaired Awareness of hypoglycemia

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Dear Sir

We read with interest the commentary in the 2025 December issue of Diabetes Care questioning the relevance of impaired awareness of hypoglycemia (IAH)¹ and our knowledge of it. While we agree with the authors on many points, we strongly resist the conclusion that the clinical presentation of hypoglycemia in people with diabetes, such as IAH, can be downplayed now or in the foreseeable future.

Reliance is increasingly placed on metrics generated by continuous glucose monitoring (CGM). While these are of unquestionable value, it is important to recognise their limitations. They give a picture of recent glucose concentrations but they do not capture patient experience.² It is our belief (a belief we suspect is shared by the authors of the commentary) that the patient experience is still paramount. Metrics such as Time Below Range (TBR) cannot identify the number, severity (and thus hypoglycemia with cognitive dysfunction requiring assistance) or symptomatology of hypoglycemic episodes or predict future risk. Scrutiny of the daily CGM profiles can identify episodes of hypoglycemia under 54 mg/dl (3 mmol/l) when the TBR is below a percentage currently recognised as dangerous).³ Number of episodes of low glucose has measurable impact⁴ and is not readily captured in current CGM summary reports. TBR can help predict severe hypoglycemia but only in the presence of IAH diagnosed by questionnaire.⁵

While we agree that better tools are urgently required for measuring hypoglycemia awareness status in the era of CGM, the definition of IAH as impaired ability to distinguish the onset of hypoglycemia is not, we believe, much disputed. Undoubtedly, the development of electronic alarms can alert a user (and indeed their insulin delivery system) to a falling glucose and take action. These attributes presumably contribute to the fall in severe hypoglycemia experienced by CGM users, regardless of awareness status. The accompanying lack of improvement in awareness scores such as the Clarke Score, its Hypoglycemia Awareness Factor and the Gold score and the continued association of IAH as defined by such scores with severe hypoglycemia risk in CGM and hybrid closed loop users⁶ means to us that they retain value in today's clinics, while awaiting the validation of newer tools. We believe these new tools will also be questionnaire based, as there is no other easy way of determining a person's 'perception' of internal cues (endogenous awareness). Meanwhile, while acknowledging their limitations, our centres, which are all frontline providers (and, we hope, diabetes centers of excellence), continue to use Gold and Clarke scores routinely, and use them to inform clinical

decisions, such as suitability for hypoglycemia awareness restoration programmes and priority for technology upgrades.

IAH remains an independent risk factor for severe hypoglycemia, not captured by CGM metrics and the data quoted above support the place of IAH as an important treatment target to achieve hypoglycemia reduction. We do not believe that the importance of IAH has been eliminated by CGM, and urge that documenting impairment of how the patient perceives his or her hypoglycemia continues to be part of our clinical assessments.

Yours faithfully

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