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To Whom it may concern

THE BENEFITS OF USING INTERMITTENT REAL-TIME CONTINUOUS GLUCOSE MONITORING IN INSULIN TREATED FRAIL ELDERLY ADULTS

The update of NICE Guidance in June 2022 including a recommendation to offer “**intermittently scanned** continuous glucose monitors (isCGM) to adults with insulin-treated type 2 diabetes who would otherwise need help from a care worker or healthcare professional to monitor their blood glucose” (recommendation 1.6.18). It also suggests considering “**real-time continuous glucose monitoring (rtCGM) as an alternative** to isCGM for adults with insulin-treated type 2 diabetes if it is available for the same or lower cost” (recommendation 1.6.19).

THE ‘GOLDILOCKS’ ZONE

The inclusion of this population marks a significant upgrade in access compared to previous recommendations. It is likely that this is an acknowledgement of the need to maintain the glucose in the “Goldilocks zone” of **not too high**, avoiding with cognitive decline, hospitalisations, urinary incontinence and reduced quality of life; and **not too low**, triggering falls, progression of frailty and approximately **doubling the risk of dementia** if they are recurrent.

For the older population, the use of rtCGM is preferred, providing it can be remotely accessed by the carers who support the individual as it can track glucose trends in real-time by providing glucose readings every five minutes and thus giving advanced **warning of impending likely daytime or night time hypoglycaemia**. In older adults the use of 10 days compared to using a conventional skin prick test strip blood glucose meter (BGM), demonstrated both improved glycaemic control and a low frequency of hypoglycaemia.

BENEFITS OF NEEDLE-FREE NON INVASIVE SKIN PATCHES FOR INTERMITTENT CONTINUOUS GLUCOSE MONITORING

When choosing a device for this population there are additional concerns. Enhancing skin health and preventing skin barrier function damage are integral parts of maintaining the health of an older adult living with diabetes. In older age the skin is more vulnerable, rendering individuals more susceptible to skin injury (skin frailty). The International Skin Tear Advisory Panel (ISTAP) based on over a decade of work, has identified the key indicators in prevention and management of skin problems, specifically recommending minimisation of any skin breaks, skin tears, pressure injuries/ulcers, moisture-associated skin damage (MASD), and skin changes at end of life. **Frail older adults are at particular risk of puncture wounds having protracted healing term, and therefore should be avoided when alternatives are available.**

As such the opportunity to monitor glycaemia remotely for older adults without causing an, albeit small, puncture wound is an attractive option. Further, by pre-emptively identifying hypoglycaemia, without causing puncture wounds, we could achieve the goal of the recent N.I.C.E. guidelines NG28 recommendations; to improve clinical outcomes in frail older adults, help them maintain their independence for longer and reduce the risk of hypoglycaemia related hospital admissions and thus indirect cost of diabetes in older adults.

Yours sincerely,



Pr. David Strain