**The feasibility and effectiveness of Libre Flash™ Glucose Monitoring in persons with insulin-requiring unstable diabetes and complex needs.**

**Background & Aim**

The SVHM Health Independence Programs (HIP) Complex Care Services support people with complex needs, including poorly controlled diabetes, who are at risk of preventable hospital presentations.

The project aimed to explore whether a Libre Flash Glucose Monitoring (LFGM) device could be utilised by people with complex needs, to improve their blood glucose control.

**Methods**

The HIP Diabetes Nurse Educators offered a 6-week trial of LFGM to eligible clients who received:

* education
* at minimum weekly support
* Endocrinologist review

Data collected included:

* "Time-In-Range"
* pre- and post- glycated haemoglobin (HbA1c) levels
* hypoglycaemic events
* device utilization
* Clinician and client perspectives

**Results**

Thirty-eight participants were recruited. Mean age was 64.8 years and 27 (71%) were male. Most participants had multiple psychosocial issues with a median 4 issues per person.

The majority of participants met and sustained the minimum regular scanning required over a 24-hour period and remained stable over the study period. Pre and post study HbA1c values demonstrated a statistically significant mean reduction.

79% (n-30) of participants completed a qualitative questionnaire. Ease of use was reported as either “very easy” (n-24, 80%) or “mostly easy” (n=6, 20%). All participants would recommend the device to others.

**Discussion/Conclusion**

Participants found the device beneficial with high acceptability and improved understanding of their diabetes. However, additional support may be needed to optimise use of this technology with a complex cohort.

Clinicians were more confident to make treatment decisions to improve patient safety and glycaemic control.

By demonstrating device feasibility and acceptability in this complex population, it may prove a cost-effective intervention to reduce preventable hospitalizations and complications from unstable diabetes.