TIGHT

CLINICAL TRIAL SUMMARY

Presenters	Jaeb Center for Health Research
Objectives	To assess whether continuous glucose monitoring (CGM) can help healthcare providers improve blood sugar control in hospitalized patients with type 2 diabetes.

https://clinicaltrials.gov/study/NCT05135676

TRIAL DESIGN

Randomized, Parallel Assignment Trial

SAMPLE SIZE

110 participants in the primary analysis

INCLUSION CRITERIA

- Age ≥18 years
- Type 2 diabetes or HbA1c ≥7.0% (if not previously diagnosed)
- ≥1 blood glucose measurement >180 mg/dL since admission
- Insulin started or planned
- Non-ICU hospitalization expected to last >3 days

METHODOLOGY

- At six academic hospitals, adults with type 2 diabetes admitted to non-ICU settings were randomly assigned to either standard therapy (glucose target: 140–180 mg/dL) or intensive therapy (glucose target: 90–130 mg/dL, guided by CGM).
- The primary outcome was mean glucose measured by CGM (blinded for the standard group), and the key secondary outcome was time spent with CGM glucose <54 mg/dL.

RESULTS

Among the 110 participants in the primary analysis, the average age was 61 ± 12 years, and the mean HbA1c was 8.9 ± 2.3% (73.8 ± 1.6 mmol/mol).

The CGM-measured mean glucose during the study was 170 mg/dL in the intensive group (n = 60) and 175 mg/dL in the standard group (n = 50), with a risk-adjusted difference of −7 mg/dL (95% CI: −19 to 5; P = 0.25).

Only 7% of the intensive group reached the target range of 90–130 mg/dL. CGM readings below 54 mg/dL were rare—0.2% in the intensive group and 0.4% in the standard group (adjusted difference −0.1%, 95% CI: −0.6 to 0.3). One severe hypoglycemia case occurred in the standard group.

CONCLUSION

The CGM-guided glucose management strategy did not lead to better glucose control compared to standard care in non–ICU hospitalized patients. Achieving a glucose target of 90–130 mg/dL may be challenging with current hospital insulin management practices.

Hirsch IB, Draznin B, Buse JB, et al. Results From a Randomized Trial of Intensive Glucose Management Using CGM Versus Usual Care in Hospitalized Adults With Type 2 Diabetes: The TIGHT Study. Diabetes Care. 2025 Jan 1;48(1):118-124. doi: 10.2337/dc24-1779. PMID: 39571106.