MANAGED CARE CGM.com

Lower A1c and Reduce Hospital/ED Use in Members with Insulin-Treated Type 2 Diabetes (T2D) via Real-Time Continuous Glucose Monitoring (rtCGM)

New clinical and economic evidence highlight the value of rtCGM in optimizing the management of T2D in diverse populations

KAISER REAL WORLD EVIDENCE[1]

STUDY DESIGN

KAISER PERMANENTE of N. California

- Propensity score-matched cohort retrospective analysis
- 30,407 members with insulin-treated diabetes
- rtCGM compared with BGM* 12 months pre/post rtCGM initiation

T2D COHORT RESULTS

0.6% Reduction in A1c

A1c difference favored rtCGM across all:

- ✓ ages (33-79 years)
- ✓ baseline A1c levels (7.1%-11.6%)
- ✓ education levels
- ✓ diabetes numeracy

51% Rate reduction in ED visits and hospitalizations

> Our real-world study found that in patients with insulin-treated diabetes, initiating a continuous glucose monitor substantially improved blood glucose control and cut the rate of emergency room visits for hypoglycemia in half.[7]

> The improvement in blood sugar control was comparable to what a patient might experience after starting a new diabetes medication.[7]

– Andrew J. Karter, PhD
Senior Research Scientist with Kaiser Permanente Division of Research

QUALITY IMPACT

18%

Increase in members meeting HEDIS[2] measure A1c <8%

KEY TAKEAWAY

Initiating rtCGM reduced both A1c and hypoglycemia requiring healthcare resource utilization among members with insulin-treated T2D.

Retrospective Analysis of Administrative Claims

An analysis of 571 patients from the Optum Research Database demonstrated a reduction in T2D-related medical costs with rtCGM.[3] **Access the ADA abstract here.**

$424 PMPM*

*BGM = Blood Glucose Monitoring

MOBILE Randomized Controlled Trial[4]

STUDY DESIGN

- 175 T2D adults treated with basal insulin randomized 2:1 to rtCGM or BGM
- Conducted over 32 weeks at 15 primary care centers

Level A Evidence[§]

RESULTS

- A1c reduction in rtCGM group without a significant increase in insulin doses or non-insulin medications
- Benefits of rtCGM were consistent across diverse racial/ethnic backgrounds comprising **52%** of the study population

QUALITY IMPACT

62%

More participants were able to achieve HEDIS measure A1c <8% using rtCGM compared to optimized BGM

	rtCGM†	Optimized BGM‡
Participants able to meet A1c <8%	63%	39%
Time Spent in Target Range (70-180 mg/dL)	59% (3.6 hours more/day)	43%
Time Spent in Hyperglycemia (>250 mg/dL)	11% (3.8 hours less/day)	27%
Mean glucose levels	179 mg/dL	206 mg/dL

1.1% A1c reduction from baseline with rtCGM

† Participants in the rtCGM group were provided with a Dexcom G6 CGM System

‡ 1 to 3 fingersticks daily

Statistically significant difference between both groups

KEY TAKEAWAY

rtCGM, as compared with BGM, reduced A1c and improved glycemic control in adults with T2D treated with basal insulin in primary care.

Emerging practice guidelines from AACE and ADA likewise highlight the benefit of covering rtCGM for plan members with T2D treated with any insulin therapy.[5,6]

CALL TO ACTION

"The time has come to broaden access to CGM for patients with type 2 diabetes."[8]

– **Monica Peek, MD, MPH,** Associate Director, Chicago Center for Diabetes Translational Research

*PMPM = Per Member Per Month

§American Diabetes Association (ADA) level A evidence = clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered.

1. Karter, AJ. JAMA (2021): https://doi.org/10.1001/jama.2021.6530. 2."NCQA. HEDIS Measures for Comprehensive Diabetes Care. https://www.ncqa.org/hedis/measures/comprehensive-diabetes-care/. 3. Norman, GJ. Diabetes (2021):https://doi.org/10.2337/db21-66-LB. 4. Martens, T. JAMA (2021): https://doi.org/10.1001/jama.2021.7444. 5. Grunberger, G. Endocr Pract (2021): https://doi.org/10.1016/j.eprac.2021.04.008. 6. American Diabetes Association. Diabetes Care (2021): https://doi.org/10.2337/dc21-S007. 7. Healio. https://www.healio.com/news/endocrinology/20210607/realtime-cgm-lowers-A1c-reduces-ed-visits-in-insulintreated-diabetes. 8. Peek ME, Thomas CC. JAMA. 2021;325(22):2255-2257. doi:10.1001/jama.2021.6208.

Supported by an educational grant from Dexcom, Inc.

Provided by: Impact Education LLC