



The 15th annual International Conference on Advanced Technologies & Treatments for Diabetes (ATTD) was held from April 27-30, 2022, in Barcelona. The following abstracts presented at the meeting highlight findings on the value of real-time continuous glucose monitoring (rtCGM) pertinent to managed care and payer decision makers.



**Clinical Outcomes**



**Avoidable Healthcare Utilization**



**Burden of Management**

## Health Economics Outcomes Research

### **Reduction in Diabetes-Related Hospitalization Rates After Real-Time Continuous Glucose Monitor (rtCGM) Initiation**

K. Hannah, P. Nemlekar, G. Norman



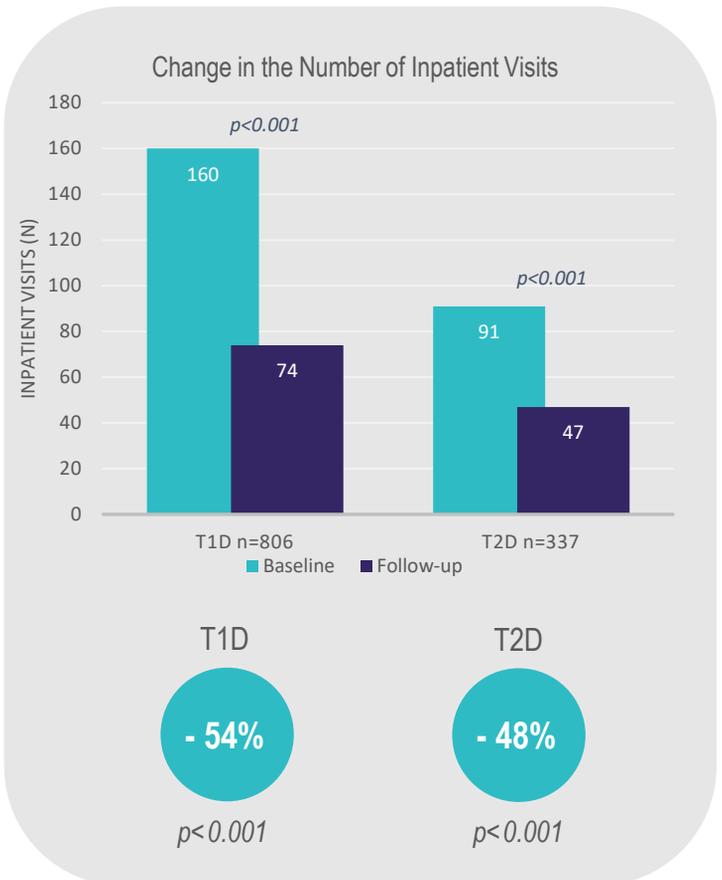
#### **Study Design**

Retrospective claims analysis of US Commercial and Medicare Advantage beneficiaries meeting the following criteria:

- ≥1 claim with rtCGM (Dexcom G6) in the identification period
- CGM naïve T1D or T2D on intensive insulin therapy during baseline
- ≥18 years of age

Diabetes-related emergency room and inpatient visits were assessed during the 12-months pre- and 12-months post-index periods and expressed as changes in number of visits and days of hospital stay.

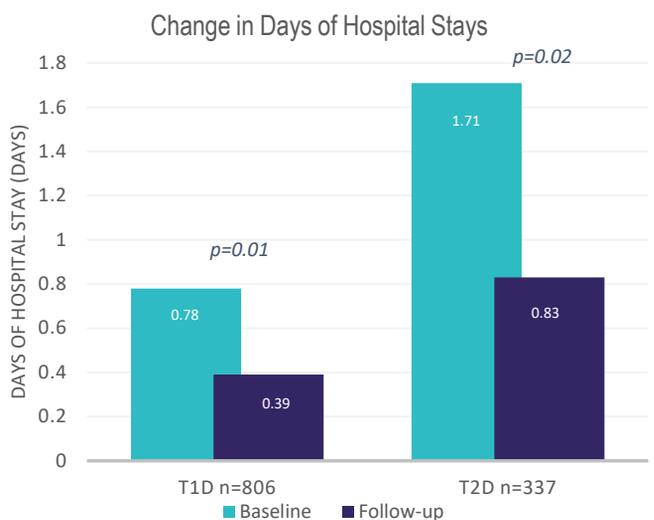
A total of 806 T1D and 337 T2D rtCGM users on intensive insulin therapy met inclusion criteria.



#### **Results**

After rtCGM initiation, statistically significant reductions were observed in diabetes-related inpatient visits (T1D=-54%,  $p<0.001$ ; T2D=-48%,  $p<0.001$ ).

rtCGM initiation further resulted in statistically significantly reduced average days of stay (T1D=-0.39 days,  $p=0.01$ ; T2D=-0.88 days,  $p=0.02$ ).



#### **Key Takeaway**

rtCGM consistently reduced diabetes-related hospitalizations across T1D and T2D populations, suggesting that enhanced access to this intervention as first-line therapy may help reduce diabetes-related hospitalization costs.



## Population Health

### Evaluating the Impact of a Combined Real-Time CGM/Digital Health Solution on Glucose Control for People with Type 2 Diabetes

A. Kumbara, A. Iyer, B. Chung, K. Leone, M. Shomali

RWE

#### Study Design

Evaluation of real-world data from individuals with T2D enrolled in a program incorporating rtCGM (Dexcom G6) with a digital health coaching platform (Welldoc).

- Assessed time in range (TIR), time below range (TBR), and the glucose management indicator (GMI) at baseline and after 24 weeks
- Three cohorts identified by duration of rtCGM use: continuous use for 24 weeks (highest users), use between 13 and 24 weeks (intermediate users), and use less than 13 weeks (lowest users)

Glucose management indicator (GMI) indicates the average A1C level that would be expected based on mean glucose measured in a large number of individuals with diabetes.

Participants (N=75) with **non-insulin-treated T2D** were targeted for intervention and used rtCGM for a mean of 17 weeks out of the 24 weeks (72%).

#### Results

Among participants with a baseline mean glucose >180 mg/dL (n=39), the rtCGM and digital health coaching intervention demonstrated statistically significant improvements in TIR and GMI, with greater improvements observed among the more frequent rtCGM users.

Participants	N	TIR			TBR			GMI		
		Baseline	End of Study	p value	Baseline	End of Study	p value	Baseline	End of Study	p value
All	75	49	57	0.02	0.8	0.3	0.197	8.0	7.8	0.174
Baseline mean glucose >180mg/dL	39	20	46	0.000003	0.2	0.5	0.175	9.2	8.2	0.0003

#### Key Takeaway

rtCGM coupled with digital health coaching has the potential to improve glycemic outcomes among participants with **non-insulin-treated T2D**. As greater frequency of use was shown to drive the magnitude of improvement, rtCGM appears to be the key component of the intervention.

For additional study information please see the full abstract for EP170 / #306 at: <https://www.liebertpub.com/doi/10.1089/dia.2022.2525.abstracts>

## Patient-Reported Outcomes (PROs)

### The Impact of Real-time Continuous Glucose Monitoring on Treatment Satisfaction in Adults with Type 2 Diabetes: Further Findings from the MOBILE Randomized Clinical Trial

W. Polonsky, A. Fortmann, K. Ruedy, R. Beck

PROs

#### Study Design

Participants with T2D from the MOBILE randomized controlled trial who used rtCGM (Dexcom G6) (n=108) and blood glucose monitoring (BGM) (n=57) completed three subscales of the Glucose Monitoring Satisfaction Survey (T2-GMSS): Openness, Emotional Burden and Behavioral Burden, at baseline and 8 months.

#### Results

Both study arms evidenced significant gains in all three aspects of glucose monitoring satisfaction, but those in the rtCGM arm felt significantly more freedom from constant diabetes management after eight months ( $p=0.003$ ) according to the Openness subscale.

GMSS Subscales	Baseline M (SD)	Month 8 M (SD)	Time by Group Interaction
Openness			
rtCGM	3.06 (0.78)	3.83 (0.71)	$p=0.003$
BGM	3.01 (0.78)	3.37 (0.71)	

#### Key Takeaway

Patient-reported outcomes from the MOBILE study demonstrate that rtCGM users feel more satisfied with management of their disease, feel less restricted by their disease, and can be more spontaneous and open to new experiences.

For additional study information please see the full abstract for OP098 / #21 at: <https://www.liebertpub.com/doi/10.1089/dia.2022.2525.abstracts>