The Use of a Real-time CGM and Digital Health Solution Lowered A1C in People with Type 2 Diabetes

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OBJECTIVES

- Many individuals with type 2 diabetes struggle to make better, "in the moment" decisions regarding food, medications, and activity and their collective impact on glycemic control
- Since real-time CGM (rtCGM) has been shown to improve glycemic outcomes for individuals with type 2 diabetes, it may also help with decision-making not related to bolus insulin dosing¹
- Al-driven digital health coaching has the potential to deliver real-time actionable insights from large amounts of raw data²
- We therefore hypothesized that combining rtCGM with digital health coaching may significantly improve A1C in non-intensive insulin users.

METHODS

- We reviewed real-world data from 117 participants who were enrolled in a program that provided both a rtCGM (Dexcom G6) as well as a digital health coaching platform (BlueStar®* by Welldoc®)
- Enrollment targeted individuals who were not prescribed insulin
- We defined two groups of participants: Those who wore the rtCGM continuously (e.g., every week for the duration of the study) and those who wore it intermittently
- We collected the A1C data at baseline, 12 weeks, and 24 weeks
- The data were de-identified according to our internal data use policy

RESULTS

Figure 1: Demographic Data

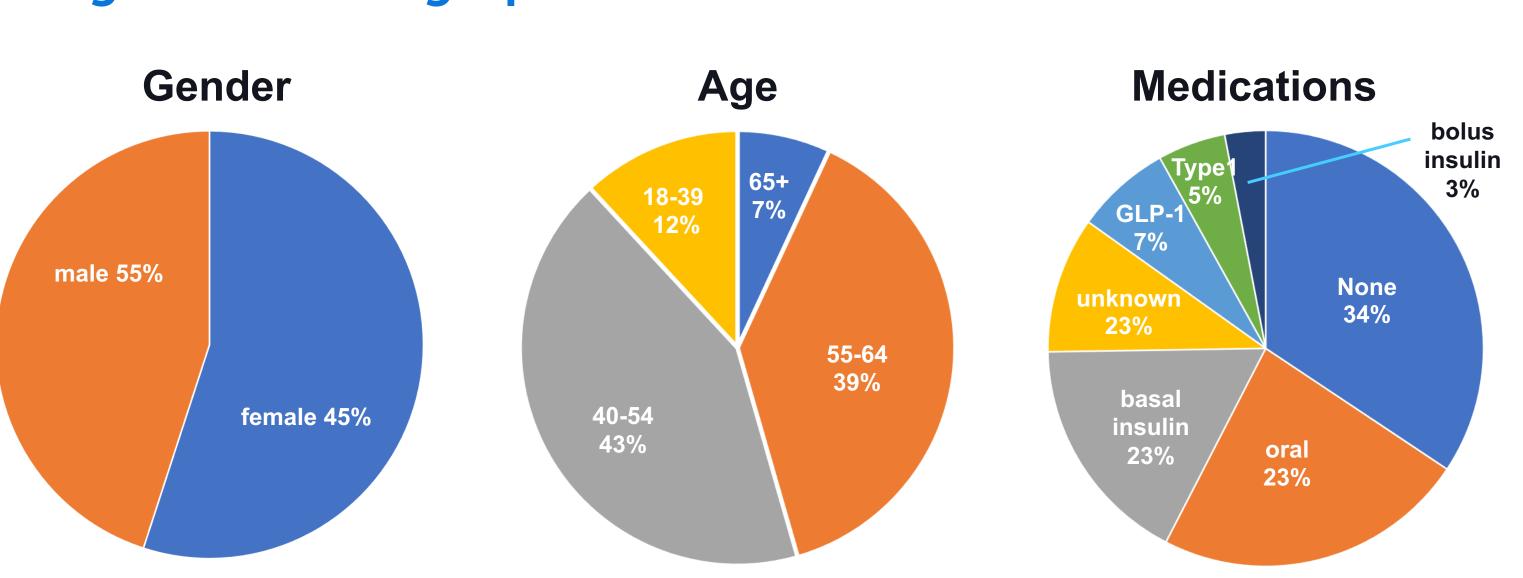


Figure 2: Baseline A1C

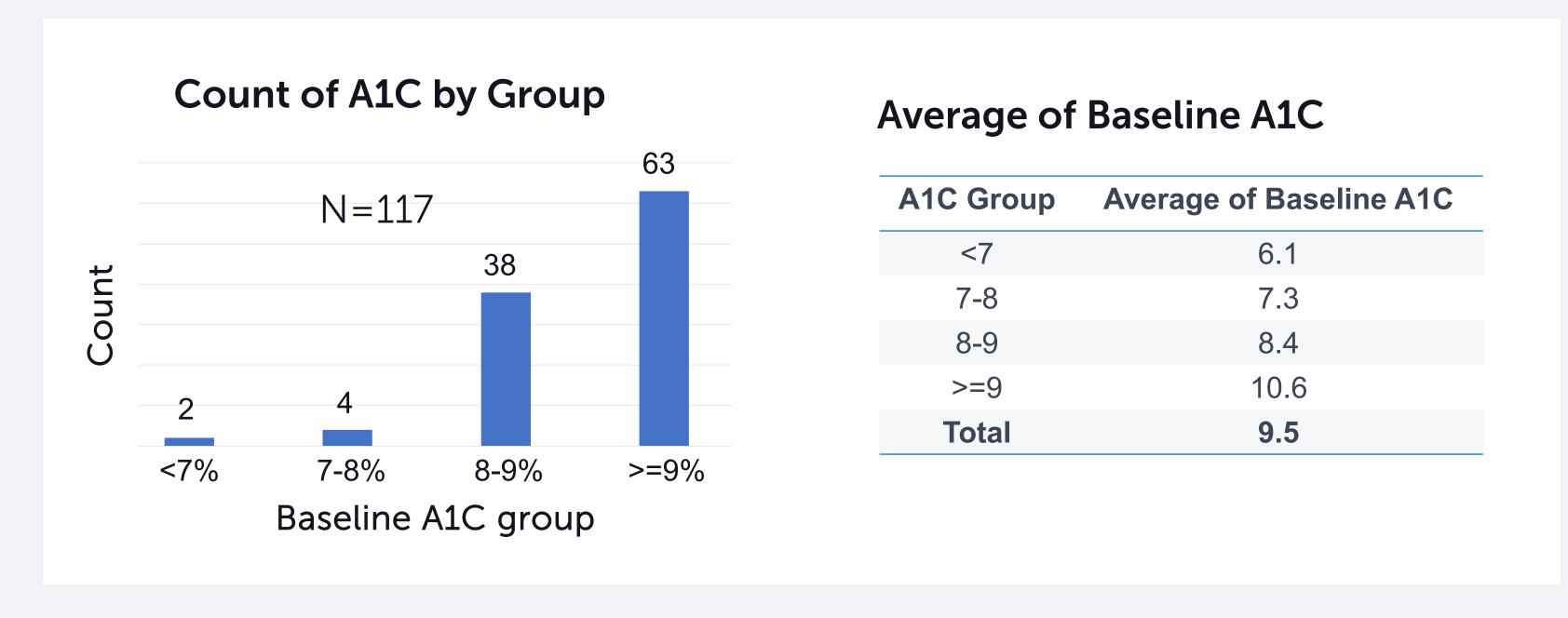


Figure 3: Overall Change in A1C by Baseline A1C Group

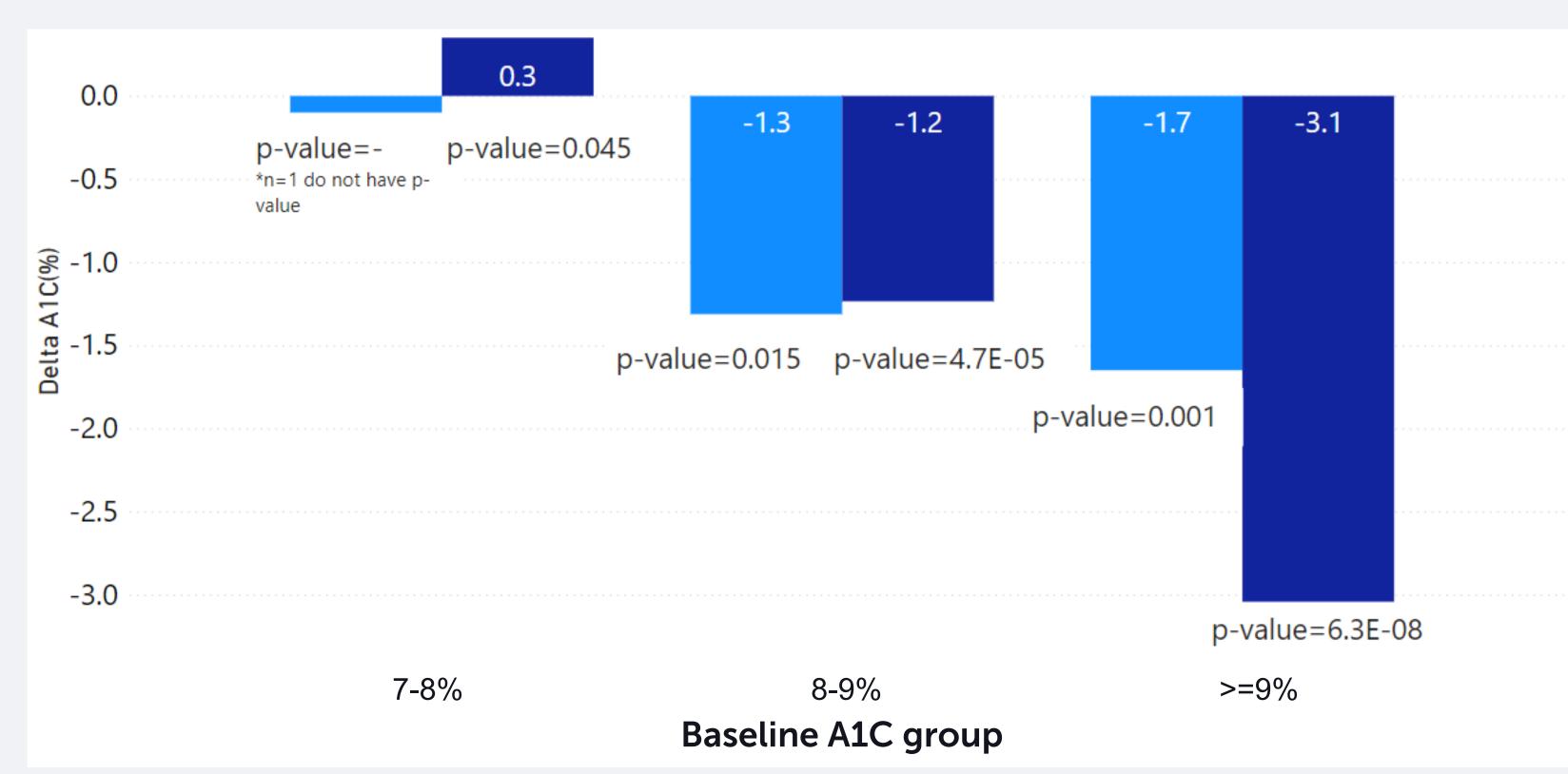
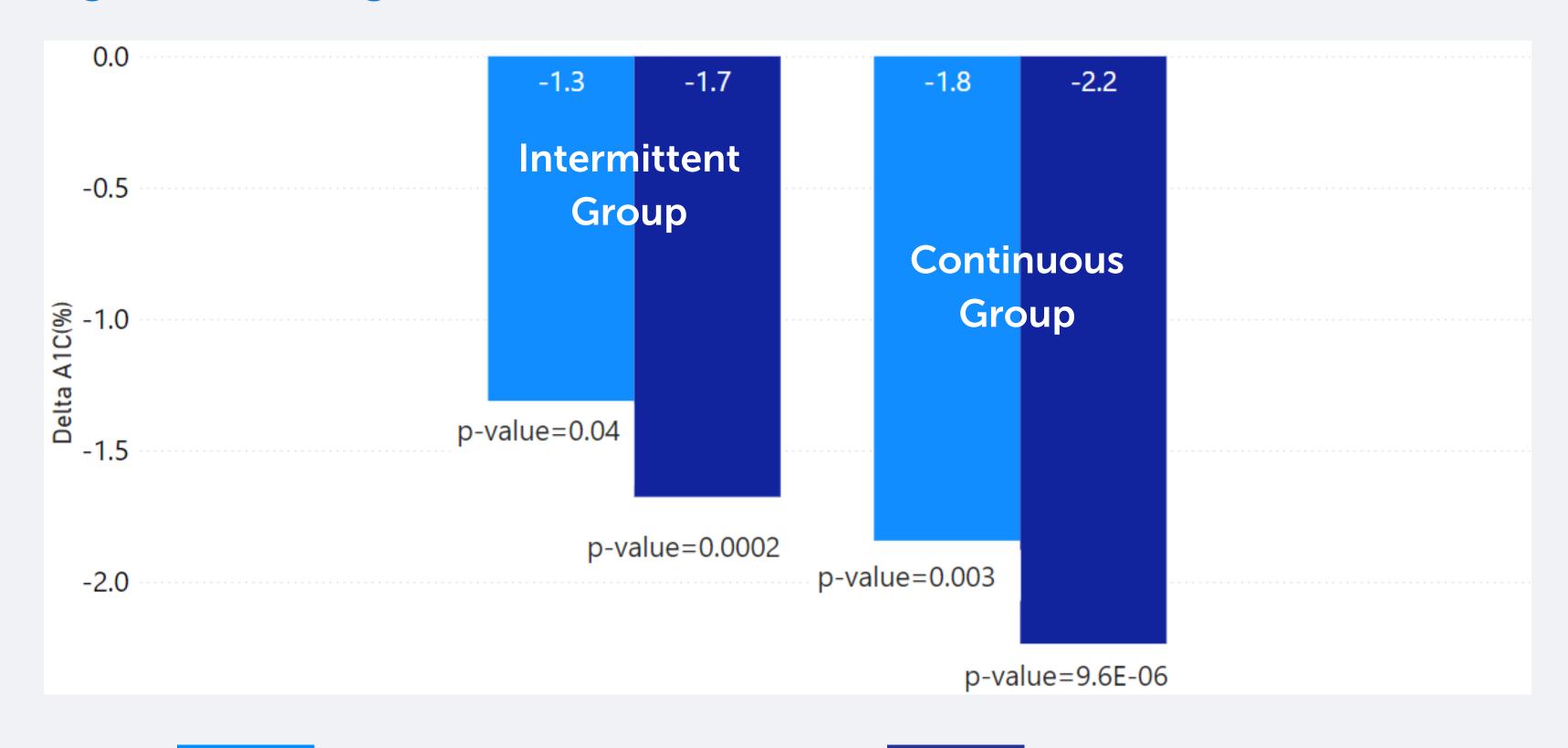


Figure 4: Change in A1C in Intermittent and Continuous Users



Change in A1C from

baseline to 12 weeks

Change in A1C from

baseline to 24 weeks

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CONCLUSIONS

- The combination of rtCGM and a digital health solution significantly improved A1C after 12 and 24 weeks of use, irrespective of baseline A1C or degree of CGM wear
- As expected, the degree of A1C decrease was greater for users in the higher baseline A1C groups
- In addition, the degree of A1C decrease was greater for users in the continuous use group
- This data highlights the important role that digital health tools may have for rtCGM users
- Further analysis can be performed to identify where intermittent CGM use can be beneficial for certain demographics of users or those on different medication regimens

REFERENCES

¹ Martens T, Beck RW, Bailey R, et al. Effect of Continuous Glucose Monitoring on Glycemic Control in Patients With Type 2 Diabetes Treated With Basal Insulin: A Randomized Clinical Trial. JAMA. 2021; 325(22): 2262-2272.

² Quinn CC, Shardell MD, Terrin ML, et al. Cluster-randomized trial of a mobile phone personalized behavioral intervention for blood glucose control. Diabetes Care. 2011 Sep;34(9):1934-42.

*Welldoc® Diabetes and Welldoc Diabetes Rx is an FDA-cleared medical device ("BlueStar"), intended for use by healthcare providers and their adult patients with type 1 or type 2 diabetes. For full labeling information, visit www.welldoc.com.

