

Loop Caregiver Study, Remote Bolusing Managed by Caregivers for Individuals with T1D Using Automated Insulin Delivery (AID) Systems: A Digital Health Solution for Diabetes Care

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Summary: This study assesses whether the **Loop Caregiver app** reduces caregiver burden and stress, and improves quality of life, by using validated surveys conducted before and three months after using the app in families of individuals with type 1 diabetes using Loop OS-AID.

Study location: [BCDiabetes: 400 - 210 West Broadway, Vancouver V5Y 3W2](#)

Background & hypothesis: Providing care for a family member with type 1 diabetes requires continuous glucose monitoring and insulin management, placing a significant burden on caregivers. While diabetes technologies improve glycemic outcomes and reduce the burden, challenges remain when caregivers are not physically present. **The Loop Caregiver app enables remote glucose monitoring, insulin bolusing, and overrides** for individuals using Loop OS-AID, yet its impact on caregiver outcomes has not been studied. This study evaluates caregiver-reported outcomes before and three months after app initiation. We hypothesize that Loop Caregiver use will reduce caregiver burden and stress while improving confidence and overall quality of life.

Eligible Participants include:

- **Age 18 years or older**
- **Parent, guardian, or primary caregiver of individual with T1D and using Loop OS-AID**
- **Have requested or initiated use of the LoopCaregiver app**
- **Meet technical requirements (Loop ≥3.3, iOS ≥16, Nightscout ≥14.2.6)**
- **Willing to complete two online surveys at baseline and three months after the app installation**

Treatment course and duration: Participation in this study is voluntary, and completion of the survey implies consent. After enrollment, you will be assigned a study identification number to link your responses while maintaining confidentiality. You will complete **two short online surveys** (approximately 5–10 minutes each): **one before starting the Loop Caregiver app and one 3 months later**. The surveys assess caregiver burden, stress, confidence, quality of life, and experience with Loop Caregiver unique features. The study is fully online, requires no clinic visits, and involves no changes to diabetes care or device data collection.

[Informed Consent and Study Information](https://bit.ly/4k0fv8W) short URL = <https://bit.ly/4k0fv8W>