

# Using closed-loop in type 1 pregnancy associated with type 1 diabetes

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A new study endorses closed-loop use in type 1 diabetes pregnancy and highlights how the technology can facilitate positive pregnancy experiences. [The study](#) is published in *Diabetes Technology & Therapeutics (DTT)*.

Julia Lawton, from the University of Edinburgh, and co-authors, on behalf of the AiDAPT Collaborative Group, interviewed closed-loop participants in the Automated insulin Delivery Amongst Pregnant women with T1D (AiDAPT) trial.

"Women described how closed-loop lessened the physical and mental demands of [diabetes](#) management, enabling them to feel more normal and sleep better," reported the investigators. "By virtue of spending increased time-in-range, women also worried less about risks to their baby and being judged negatively by [health care professionals](#)."

"To realize fully the benefits of closed-loop, [pregnant women](#) would benefit from initial, intensive oversight and support together with closed-loop specific education and training," stated the investigators.

"No closed-loop system is approved in the U.S. for pregnancy use as the targets needed are much tighter during pregnancy associated with T1D," states Satish Garg, MD, Editor-in-Chief of *Diabetes Technology & Therapeutics*, and Professor, University of Colorado Denver, Barbara Davis Center for Diabetes.

"The only system that allows that is CamAPS FX, which is approved in Europe and Australia. The percentage of time that participants spent in the pregnancy-specific target glucose range (63 to 140 mg/dL) as measured by [glucose sensors](#) from 16 weeks' gestation until delivery was significantly higher among participants in the closed-loop group than among those in the standard-care group, with a difference between groups of 10.5 percentage points. I recently wrote [an editorial](#) in the *New England Journal of Medicine* on this topic: 'Technology Use and Glycemic Outcomes during Pregnancy with Type 1 Diabetes.'"

**More information:** Julia Lawton et al, Listening to women: experiences of using closed-loop in type 1 diabetes pregnancy, *Diabetes*

*Technology & Therapeutics* (2023). [DOI: 10.1089/dia.2023.0323](https://doi.org/10.1089/dia.2023.0323)

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