

Extended use of MiniMed™ 780G system demonstrates increased trust in automation of insulin delivery and sustained glycemic improvement

After three years, most insulin was delivered automatically by the system, and those who used the recommended optimal settings experienced the greatest benefits.

GALWAY, Ireland - September 16 – Medtronic plc (NYSE: MDT), a global leader in healthcare technology, today presented compelling real-world evidence demonstrating that the MiniMed™ 780G system provided rapid and sustained improvements in glycemic control for people living with type 1 diabetes, while significantly reducing patient burden by automating a growing percentage of insulin delivery over time. The data[†] was presented at the European Association for the Study of Diabetes (EASD) 61st Annual Meeting in Vienna.

Let the system do the work: Trust in automation grows with consistent results

For many living with diabetes, the constant need to monitor blood glucose and manage insulin can be overwhelming and exhausting. Automation is transforming this experience, offering a sense of relief and renewed hope. Automated insulin delivery systems, like the MiniMed™ 780G system, use advanced algorithms and real-time data to adjust insulin delivery automatically, easing the daily burden on individuals and their loved ones. Over time, as these systems take on more of the routine management, users can focus more on living their lives—enjoying moments with family, friends, and pursuing their passions—with greater confidence in their health. This application of automation not only supports safer, more consistent blood glucose control, but also restores a sense of freedom and peace of mind for those managing diabetes every day.

“At first, I was hesitant to trust automation to manage my insulin automatically. Letting go of that constant need to monitor and adjust my doses felt daunting, almost like giving up control” says George Kelesidis from Greece who uses the MiniMed™ 780G system to manage his diabetes. “But over time, as I saw the system consistently keeping my glucose levels in range and stepping in when I needed support, my fears eased. Now, I feel so much more freedom in my everyday life—less weighed down by the stress of diabetes management. I can focus on my family, work, and the things I love, knowing the MiniMed™ 780G system is there in the background, reliably taking care of me.”

Real-world data shows durability of initial improvements in glycemic control

Data[†] collected from 1,145 participants aged 16 and older across Europe, the Middle East, and Africa (EMEA) highlight the MiniMed™ 780G system’s impact on both clinical outcomes and the daily lives of users. After initiating the system, users experienced a rapid increase in time spent within the target glucose range (70-180 mg/dL), rising to 78.6% and remaining relatively stable throughout the 36-month observation period. Key findings include:

- **Improved Glycemic Control:** Average time in range increased rapidly to 78.6% and was relatively sustained over three years.
- **Greater Automation, Lower Patient Effort:** The average percentage of insulin delivered by autocorrection rose from 0% to 12.9% immediately, and grew to 17.2% by year three, while user-initiated insulin delivery decreased from 52.4% to 41.5%.
- **Growing Trust in Technology:** Use of recommended optimal system settings (glucose targets of 100 mg/dL and active insulin time of 2 hours) increased significantly, indicating rising confidence among users and healthcare providers.

“These findings highlight the significant ability of the MiniMed™ 780G system to improve diabetes care, providing lasting clinical and lifestyle advantages,” said Dr. Jennifer McVean, Senior Medical Affairs Director at Medtronic Diabetes. “As we move closer to fully automated insulin delivery, empowering people with type 1 diabetes to trust and rely on these technologies will be key to achieving better outcomes and improved quality of life.”

[†] “CareLink Personal” data from January 2020 to January 2025 were extracted from MiniMed 780G system users, who self-reported to be 16 years old and above with type 1 diabetes, who were registered in EMEA and who provided consent. Users with ≥10 days of sensor glucose data before automation and users with ≥10 days of sensor glucose data in each of the 36 months after advanced hybrid closed loop (AHCL) initiation were included in analyses.

About the MiniMed™ 780G system

The MiniMed™ 780G system is the most advanced insulin pump system from Medtronic. The MiniMed™ 780G system's SmartGuard™ algorithm (also referred to as the advanced hybrid closed-loop algorithm) automates the delivery of insulin every five minutes –

personalizing these doses to auto-correct[†] highs every five minutes based on CGM readings. This helps account for when users occasionally forget to bolus** or underestimate the number of carbs in their meal.[§] The MiniMed™ 780G is the only system designed to offer frequent auto-corrections capable of delivering the full amount of insulin a user may need in a single auto-correction for a patient glucose level,^Δ helping over 85% of users achieve ADA glycemic targets with the use of recommended settings^{§§} (glucose targets of 100 mg/dL and active insulin time of 2 hours). This powerful algorithm that delivers 5-minute auto-corrections has resulted in real-world Time in Range nearing 80% on average with recommended settings

[†] Refers to auto correct, which provides bolus assistance. Can deliver all auto correction doses automatically without user interaction, feature can be turned on and off.

^Δ up to 400 mg/dl

[§] Refers to SmartGuard™ feature. Individual results may vary.

** Taking a bolus 15-20 min before a meal helps to keep blood sugar levels under control after eating

About the Diabetes Business at Medtronic

Medtronic Diabetes is on a mission to make diabetes more predictable, so everyone can embrace life to the fullest with the most advanced diabetes technology and always-on support when and how they need it. We've pioneered first-of-its-kind innovations for over 40 years and are committed to designing the future of diabetes management through next-generation sensors (CGM), intelligent dosing systems, and the power of data science and AI while always putting the customer experience at the forefront.

About Medtronic

Bold thinking. Bolder actions. We are Medtronic. Medtronic plc, headquartered in Galway, Ireland, is the leading global healthcare technology company that boldly attacks the most challenging health problems facing humanity by searching out and finding solutions. Our Mission – to alleviate pain, restore health, and extend life – unites a global team of 95,000+ passionate people across more than 150 countries. Our technologies and therapies treat 70 health conditions and include cardiac devices, surgical robotics, insulin pumps, surgical tools, patient monitoring systems, and more. Powered by our diverse knowledge, insatiable curiosity, and desire to help all those who need it, we deliver innovative technologies that transform the lives of two people every second, every hour, every day. Expect more from us as we empower insight-driven care, experiences that put people first, and better outcomes for our world. In everything we do, we are engineering the extraordinary. For more information on Medtronic, visit www.Medtronic.com and follow Medtronic on [LinkedIn](#).

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.



Contacts:

Andrew Crawford
Public Relations
+41-79-378-1932

Ryan Weispfenning
Investor Relations
+1-763-505-4626

ⁱ J. McVean et al. "Achieved and sustained glycaemic outcomes with reduction in burden: three-year real-world follow-up of the MiniMed 780G system". European Association for the Study of Diabetes (EASD) 2025

ⁱⁱ Choudhary et al. Diab Tech Ther. 2024; 26 :DOI : 10.1089/dia.2023.0433.

Additional assets available online:  [Photos](#) 

https://stage.mediaroom.com/minimed_mr/2025-09-16-Extended-use-of-MiniMed-TM-780G-system-demonstrates-increased-trust-in-automation-of-insulin-delivery-and-sustained-glycemic-improvement