



Consensus Statement on Automated Insulin Delivery for Type 1 Diabetes in Australia

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Summary

All Australians living with type 1 diabetes (T1D) need affordable access to life-changing Automated Insulin Delivery (AID).

- AID is the **standard of care** for people with T1D. However, Australia's current funding model puts AID out of reach for most Australians with T1D.
- AID systems work by connecting an insulin pump with a continuous glucose monitor (CGM) to automate insulin delivery to suit the person's glucose levels, minute by minute, maintaining them within target range. This is beyond what anyone living with T1D can achieve manually with currently funded technologies.
- **The research is clear:** AID improves glucose levels, alleviates the negative impacts that T1D has on quality of life, reduces the risk of complications and is a cost-effective investment for our health system.
- CGMs are already Government funded in Australia, but unrestricted access to insulin pumps is lacking. **Additional funding is crucial** to support pump access, leverage existing investment in CGM access, and ensure equitable and affordable access to AID, regardless of age, financial circumstance, or postcode.
- **A staged implementation strategy** for pump funding will ensure feasible, equitable and sustainable AID use in Australia, minimising issues related to product supply and healthcare workforce training and resourcing.

Endorsed by a consultation group of Australians living with T1D and:



Background

Automated insulin delivery (AID) has positively transformed the lives of people living with type 1 diabetes (T1D) who have the means to access the technology.

Australian and international guidelines now recommend AID systems as the standard of care for people with T1D who wish to use them^{1,2}.

AID systems connect an insulin pump with a continuous glucose monitor (CGM) to automatically adjust insulin delivery to suit the person's glucose levels, minute by minute, maintaining them within target range. This is beyond what anyone living with T1D can achieve manually with currently funded technologies.

AID systems have been proven to reduce the mental burden of managing T1D, alleviate the negative impacts that T1D has on quality of life, and increase the proportion of people achieving the recommended glucose ranges known to reduce the risk of complications amongst people with T1D from all backgrounds. They are an equaliser in the management of T1D and are a cost-effective investment for health systems^{3,4}.

Despite overwhelming evidence supporting AID as the standard of care for T1D, access to this life-changing technology in Australia remains determined largely by financial circumstances, increasing health inequities.

Issues

1. Access to AID is inequitable.

Fewer than 20% of Australians living with T1D use an AID system. Australia's insulin pump funding model places AID out of reach for most people with T1D. Our 'user-pays' funding model disadvantages those with the lowest incomes and those who are not eligible for concessions, creating substantial inequities^{5,6}.

For those who self-fund their AID systems, doing so may compromise their ability to afford other things important for their health and quality of life and their families, e.g. healthy food, higher education.

In countries such as England, New Zealand, Scotland and Wales, public funding has been expanded to include AID systems, improving access to this life-changing technology^{7,8}.

2. AID funding in Australia.

The Federal Government's subsidy of CGM provides welcome assistance to people living with T1D, and partially unlocks the potential of AID. However, Australia's outdated insulin pump funding model remains a major barrier to equitable access to AID. Current insulin pump access pathways include:

- **Private health insurance (PHI)** – the primary pathway to access an insulin pump (>80%). This requires top tier hospital cover (approximately \$2,500 per annum). Recent data shows fewer than half of all Australians have a policy with hospital cover⁹.

- **Out-of-pocket** – purchasing an insulin pump costs \$7,000–\$10,000 every four years, and this payment may be required upfront, which is out of the reach of many.
- **The Insulin Pump Program (IPP)** – an Australian Government-funded, means-tested program of limited scale, which has provided fewer than 300 pumps on average per year in its 15-year history. Notably, the IPP does not offer a choice of device. Funding also does not go beyond the age of 21 years.
- **Fundraising or philanthropy** (e.g., GoFundMe) – for a small number of people.

3. Embedding choice with access.

Several AID systems are available, which vary in their features (e.g., accessibility requirements, water resistance, reservoir capacity). People with T1D vary in their needs, preferences and priorities. The most important factors in sustained use to enable optimal health outcomes are the usability of an AID system and matching the features to an individual’s requirements.

Recommendations

The signatories to this consensus statement endorse the following recommendations to create equitable access to AID for Australians living with T1D.

Recommendation 1: ACCESS

Every Australian with T1D should have access to an AID system, regardless of age, financial circumstance, or postcode, should they choose to use one.

Recommendation 2: CHOICE

As AID systems vary in terms of their features, they can cater to the varied needs of people with T1D. Expanded access should enable, not restrict, individual choice of AID system.

Recommendation 3: IMPLEMENTATION

A staged implementation strategy for access to AID technology will provide a practical pathway towards fair and sustainable access for all over time and avoid exacerbating existing health inequalities. It will also minimise issues related to product supply and healthcare workforce training and resourcing.

References

1. American Diabetes Association Practice Committee. Standards of Care in Diabetes—2024. *Diabetes Care* 2024;47(Suppl. 1):S1–S328
2. Living Evidence for Diabetes Consortium. Australian Evidence-Based Clinical Guidelines for Diabetes 2020. Accessed June 2024.
3. Pease, A., Callander, E., Zomer, E., Abraham, M. B., Davis, E. A., Jones, T. W., Liew, D., & Zoungas, S. (2022). The Cost of Control: Cost-effectiveness Analysis of Hybrid Closed-Loop Therapy in Youth. *Diabetes care*, 45(9), 1971–1980. <https://doi.org/10.2337/dc21-2019>
4. Pease, A., Zomer, E., Liew, D., Earnest, A., Soldatos, G., et al. (2020). Cost-effectiveness analysis of a hybrid closed-loop system versus multiple daily injections and capillary glucose testing for adults with type 1 diabetes. *Diabetes Technology & Therapeutics*, 22(11), 812–821.
5. Lomax, K. E., Taplin, C. E., Abraham, M. B., Smith, G. J., Haynes, A., et al. (2023). Socioeconomic status and diabetes technology use in youth with type 1 diabetes: A comparison of two funding models. *Frontiers in Endocrinology*, 14, 1178958. <https://doi.org/10.3389/fendo.2023.1178958>
6. Lomax, K. E., Taplin, C. E., Abraham, M. B., Smith, G. J., Haynes, A., et al. (2024). Improved glycemic outcomes with diabetes technology use independent of socioeconomic status in youth with type 1 diabetes. *Diabetes Care*, 47(4), 707–711. <https://doi.org/10.2337/dc23-2033>
7. NHS England. 2024. Hybrid closed loop technologies: 5-year implementation strategy. [Online] Available at: <https://www.england.nhs.uk/long-read/hybrid-closed-loop-technologies-5-year-implementation-strategy/>. Last accessed June 2024.
8. Pharmac. (2024, March 28). Proposal to fund continuous glucose monitors, insulin pumps, and insulin pump consumables. Te Pātaka Whaioranga. <https://pharmac.govt.nz/news-and-resources/consultations-and-decisions/consultation-2024-03-28-cgm>
9. Australian Prudential Regulation Authority. (2024, June). *Quarterly private health insurance statistics*. Retrieved from <https://www.apra.gov.au/quarterly-private-health-insurance-statistics-0>

*"I could never afford something like that on my own, but Helen worked her magic and found someone from Alice Springs Type 1 community and Alice Springs T1 support group who **donated it to me**. She also helped the group with fundraising. I was speechless and could not stop crying when I went on the pump. I really do not want to be blind or go on dialysis like many of my relatives."*

- Dusty, lives with T1D



***"Diabetes does not discriminate,** and yet our funding model for treating it does. Let's work together to fix this."*

- Meaghan, lives with T1D

*"Access to AID technology helped me have a healthy pregnancy and supports me to be an active, healthy mum. **Every family deserves the same opportunity** and quality of life for their loved ones!"*

- Ella, lives with T1D



The signatories to this Consensus Statement include the following Australians with T1D lived experience: Ange Liston-McCaughley, Ben Nash, Cheryl Steele, Cindy Shay, David Burren, Ella Hopgood, Gordon Bunyan, Joshua Byrnes, Leanne Foster, Leon Tribe, Meaghan Read and Renza Scibilia.