

Integrated Personalised Diabetes Management

A holistic, therapeutic approach

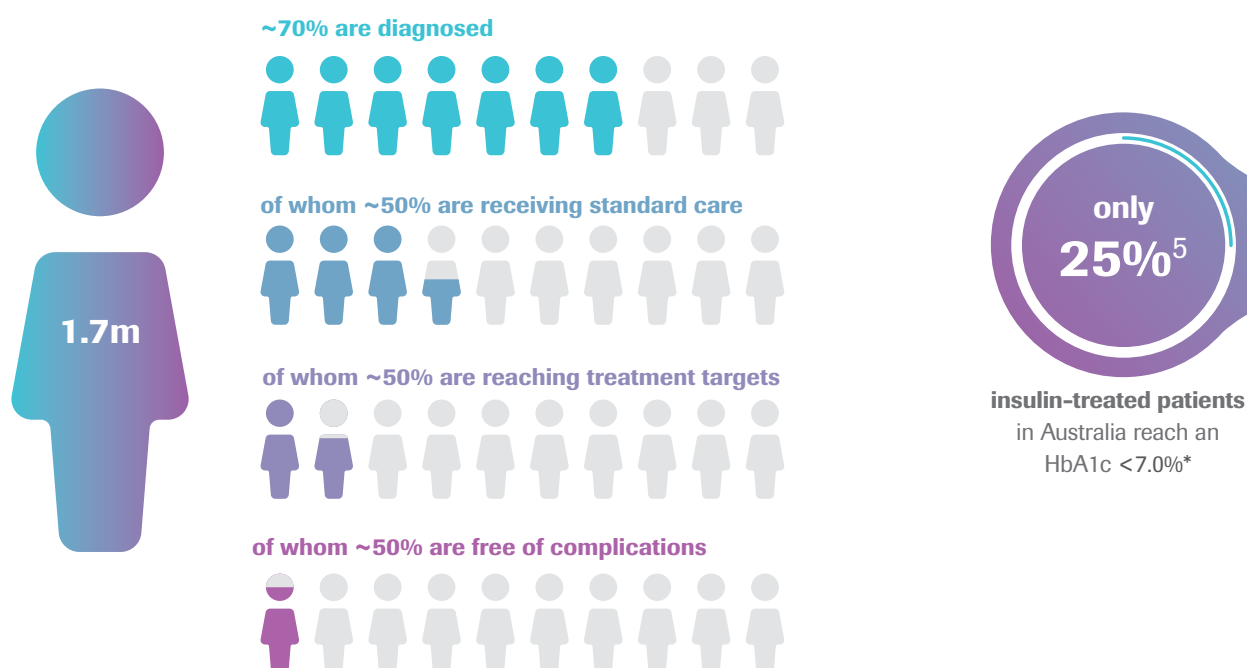


The diabetes epidemic

Diabetes is the epidemic of the 21st century, impacting over 463 million people worldwide. According to the International Diabetes Federation, the number is expected to escalate to 700 million by 2045.¹ Estimates reveal that fewer than 50% of adults with diabetes achieve the HbA1c goal of <7.0%.^{2,3}

There are significant gaps in the management of diabetes in Australia⁴

Of the estimated 1.7m people with diabetes in Australia...



Urgent need to prevent and better manage diabetes⁶

1.7 million

- › Australians have diabetes.

>280 Australians

- › develop diabetes every day.

Number 1

- › Diabetes is the leading cause of preventable blindness in Australia.

>4,400

- › there are more than 4,400 amputations every year in Australia as a result of diabetes.

Heart disease

- › people with diabetes are between two and four times more likely to develop heart disease.

Kidney disease

- › an estimated 360,000 people with diabetes are living with kidney disease.

* Retrospective analysis of patients with T2D in Australia.

Therapeutic inertia

The primary barrier to achieving optimal glycaemic control is therapeutic inertia, a combination of both patient and clinician behaviors.⁷

- › Treatment changes are delayed or not initiated⁷⁻⁹
- › Individuals fail to meet therapy goals¹⁰⁻¹³

International clinical guidelines advise escalating treatment if individualised glycaemic targets are not met within 3 to 6 months of treatment start.^{14,15} However, treatment changes even when clinically indicated often do not occur,¹⁴⁻¹⁶ and many individuals with diabetes do not achieve treatment goals in spite of treatment recommendations, new and emerging medications and advancements in medical devices.¹⁰⁻¹³

Reasons for therapeutic inertia⁷



Clinicians

- › Insufficient time
- › Lack of treatment initiation

People with diabetes

- › Low health literacy
- › Lack of acceptance
- › Medication: number, cost, side effects

Payers and health system

- › Lack of decision support
- › No disease registry
- › Communication gaps

Our ambition is to change the way to treat diabetes and overcome therapeutic inertia.



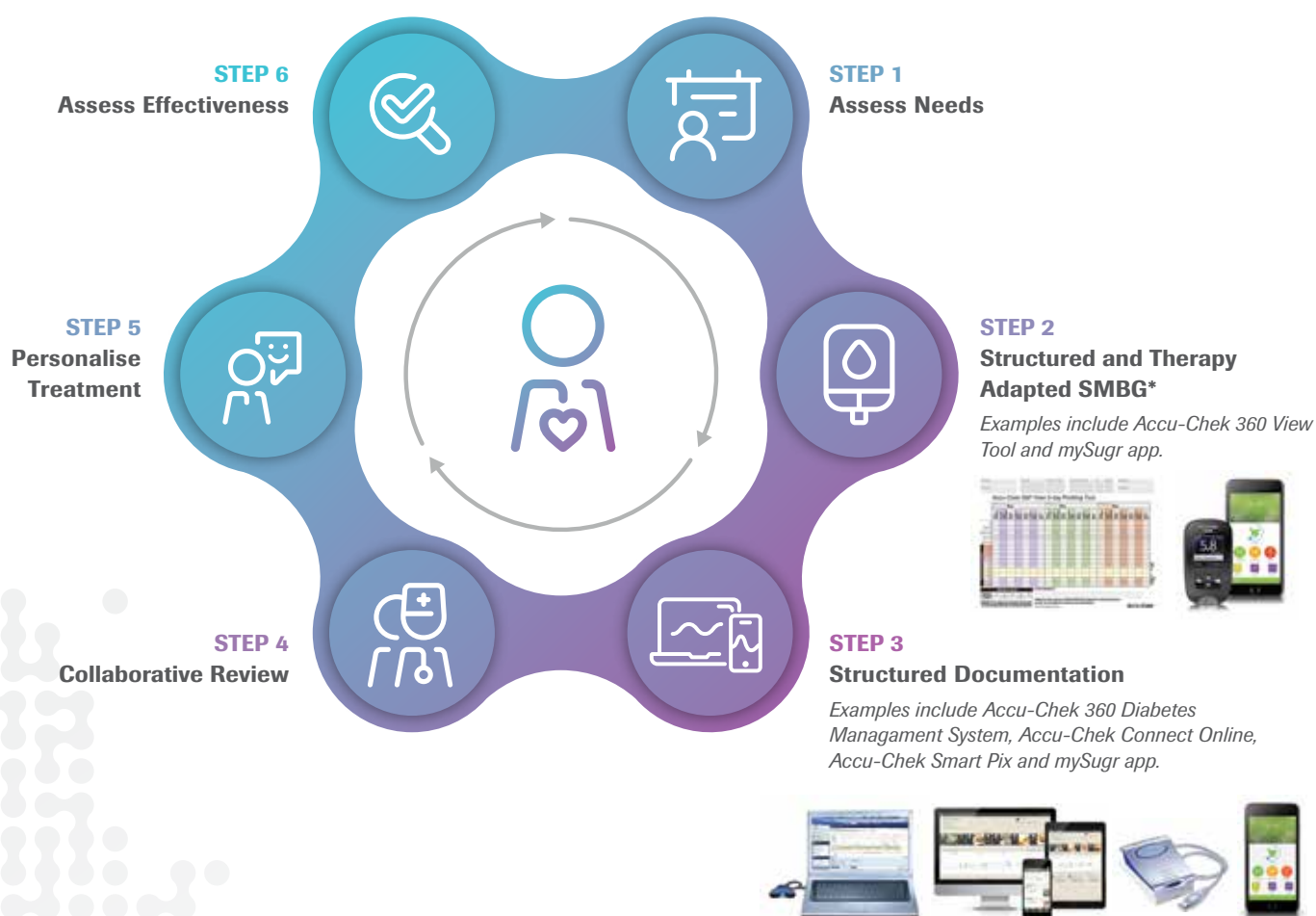
Integrated Personalised Diabetes Management (iPDM)

A holistic, therapeutic approach

Our approach strengthens the patient care process by integrating digital solutions that quickly turn data into meaningful insights. And, we do this to facilitate stronger communication and collaboration between HCP and patient for more timely treatment decisions.

1. An initial examination of the patient's condition is performed, followed by an individualised education prescription.
2. The blood glucose data are collected in a structured way that is adapted to the therapy.
3. Glucose and other diabetes-related data are documented.
4. Healthcare professionals collaborate with patients to interpret results.
5. Patients and professionals decide on the treatment and objectives based on abilities and circumstances.
6. The treatment is redefined or adjusted if necessary. The cycle repeats to help patients reach therapy goals.

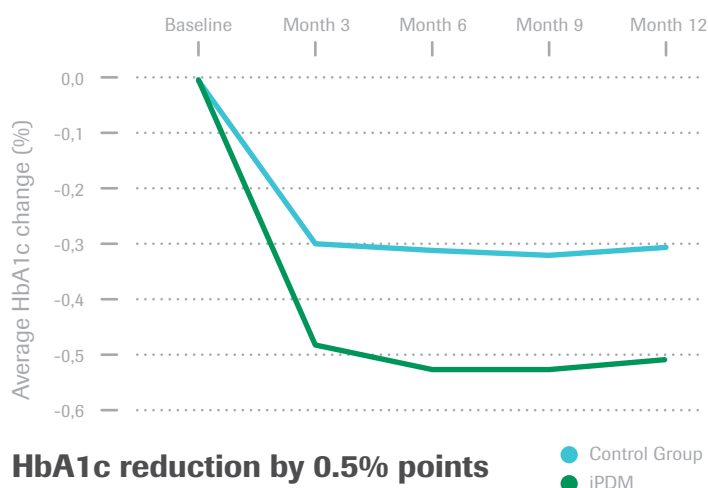
The iPDM process steps¹⁴



* Self-monitoring of blood glucose (SMBG).

Proven results — through a more personalised approach.

Significantly improved therapy results¹⁴



- › **HbA1c decreases by 0.5% points** over 12 month in patients treated with the iPDM circle.
- › Significantly higher HbA1c decrease with iPDM despite significant effect in the control group.
- › Scale of HbA1c reduction **comparable to efficacy of drug therapy**.
- › iPDM improved glycemic control without increasing risk of hypoglycaemia.

iPDM - an approach that works¹⁴



Earlier and personalised
therapy adjustments



Improved
HbA_{1c} values



Greater **satisfaction**
amongst patients and HCPs

Building on a legacy of digital solutions to enable iPDM, our commitment is to strengthen the patient care process by offering tools and support.

References

1. IDF Diabetes Atlas, 9th ed. International Diabetes Federation: 2019.
2. Stone MA, Charpentier G, Doggen K, et al.; GUIDANCE Study Group. Quality of care of people with type 2 diabetes in eight European countries: findings from the Guideline Adherence to Enhance Care (GUIDANCE) study. *Diabetes Care* 2013;36:2628–2638.
3. Ali MK, Bullard KM, Gregg EW. Achievement of goals in U.S. Diabetes Care, 1999–2010. *N Engl J Med* 2013;369:287–288.
4. Sainsbury E, et al. Burden of diabetes in Australia: it's time for more action. Preliminary Report July 2018. Available at: <https://www.sydney.edu.au/content/dam/corporate/documents/faculty-of-medicine-and-health/research/centres-institutes-groups/burden-of-diabetes-its-time-for-more-action-report.pdf>. Accessed: 12 Jan 2020.
5. Fulcher G, et al. *Diabetes Res Clin Pract*. 2015; 108(3): 405–13.
6. Facts about diabetes, Diabetes Australia. Available at: <https://www.diabetesaustralia.com.au/about-diabetes/diabetes-in-australia/>. Accessed: 20 December 2020.
7. Reach G, Pechtnner V, Gentilella R, et al. Clinical inertia and its impact on treatment intensification in people with type 2 diabetes mellitus. *Diabetes Metab* 2017;43(6):501–511.
8. Khunti K, Gomes MB, Pocock S, et al. Therapeutic inertia in the treatment of hyperglycaemia in patients with type 2 diabetes: a systematic review. *Diabetes Obes Metab* 2018 Feb;20(2):427–437.
9. Khunti K, Nikolajsen A, Thorsted BL, Andersen M, Davies MJ, Paul SK. Clinical inertia with regard to intensifying therapy in people with type 2 diabetes treated with basal insulin. *Diabetes Obes Metab* 2016;18:401–409.
10. Stone MA, Charpentier G, Doggen K, et al.; GUIDANCE Study Group. Quality of care of people with type 2 diabetes in eight European countries: findings from the Guideline Adherence to Enhance Care (GUIDANCE) study. *Diabetes Care* 2013;36:2628–2638.
11. Carls G, Huynh J, Tuttle E, et al. Achievement of glycated hemoglobin goals in the US remains unchanged through 2014. *Diabetes Ther* 2017;8:863–873.
12. Raccach D, Enels Chou E, Colagiuri S, et al. A global study of the unmet need for glycaemic control and predictor factors among patients with type 2 diabetes mellitus who have achieved optimal fasting plasma glucose control on basal insulin. *Diabetes Metab Res Rev*. 2017 Mar;33(3): e2858. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5347910/>. Accessed 2019 May 18.
13. Brath H, Paldanius PM, Bader G, Kolaczynski WM, Nilsson PM. Differences in glycaemic control across world regions: a post-hoc analysis in patients with type 2 diabetes mellitus on dual antidiabetes drug therapy. *Nutr Diabetes* 2016 Jul;6(7): e217. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4973138/>. Accessed 2019 July 1.
14. Kulzer B, Daenschen W, Daenschen I, et al. Integrated personalised diabetes management improves glycaemic control in patients with insulin- treated type 2 diabetes: Results of the PDM-ProValue study program. *Diabetes Res Clin Pract* 2018;144:200–212.

RocheDiabetes supports you and your patients

- ✓ **Simply More Diabetes Pack:** everything you need for your blood glucose monitoring.
- ✓ **mySugr App:** all diabetes data in one place.
- ✓ **Service:** Australian based phone support, YouTube training videos, educational materials.



*NDSS Consumption By Patient segmentation. Accessed Jun 2020

WARNING – KEEP BATTERIES OUT OF REACH OF CHILDREN. If you suspect your child has swallowed or inserted a button battery immediately call the 24-hour Poisons Information Centre on 13 11 26 for fast, expert advice. **FOR PEOPLE WITH DIABETES. ALWAYS READ THE INSTRUCTIONS FOR USE. CONSULT YOUR HEALTHCARE PROFESSIONAL FOR ADVICE.** Accu-Chek lancing devices are for single patient use only. The same device must not be used by multiple patients. ACCU-CHEK, ACCU-CHEK CONNECT, ACCU-CHEK GUIDE, ACCU-CHEK 360°, ACCU-CHEK SMART PIX, FASTCLIX, CLIXMOTION and MYSUGR are trademarks of Roche. © 2021 Roche Diabetes Care. Roche Diabetes Care Australia Pty Limited, 2 Julius Avenue, North Ryde NSW 2113. ABN 69 602 140 278. Date of preparation: January 2021. AU-785 09391690001.