

MEDIA RELEASE

**NHG POLYCLINICS' STRUCTURED WEIGHT MANAGEMENT PROGRAMME
HELPS PATIENTS ACHIEVE DIABETES REMISSION**

Weight loss is key to achieving diabetes remission

Singapore, 26 August 2025 – In a significant stride towards combating diabetes, NHG Polyclinics, the primary care arm of NHG Health, has achieved pioneering results with a structured weight management programme. A clinical trial it undertook has shown that 41.9% of participants with early type 2 diabetes achieved diabetes remission¹ after one year in the programme administered by dietitians and Family Physicians in a primary care setting. This attests to NHG Health's commitment to innovative healthcare solutions and proactive community health management.

2 Modelled after the landmark UK DiRECT study and tailored to Singapore's dietary and cultural context, the NHG Health Diabetes Remission Clinical Trial — is, to our knowledge, the first diabetes remission trial in primary care in Southeast Asia — demonstrated that type 2 diabetes remission is achievable through community-based care without the use of medications or surgery. This clinical trial, jointly funded by NHG Health Fund and Tanoto Foundation, contributes valuable findings that adds to the growing global evidence base for diabetes remission and offers a promising new strategy to address one of Singapore's most pressing health challenges.

3 "We partnered with the NHG Health on the diabetes reversal study to address one of Singapore's most serious and prevalent health challenges, which requires solutions at national scale. This collaboration bridges existing Western research and tailors it for Asian populations," said Imelda Tanoto, member of the Board of Trustees, Tanoto Foundation. "We are especially excited that the clinical trial has produced positive findings, which can shape how NHG Health better manages diabetes and improve outcomes for thousands of families in Central and North Singapore – a step towards catalysing the kind of systems change needed to tackle such complex health challenges. It also reinforces Singapore's role as a hub for medical research and innovation, utilising its world-class talent, governance, and technologies."

4 "As an integral part of NHG Health, NHG Polyclinics is at the forefront of research and innovation to prevent disease and improve patient care. With one in three Singaporeans projected to develop diabetes in their lifetime, it is critical that we move beyond simply controlling the disease to reversing it where possible. This study provides strong evidence that community-based care, one without the use of expensive medications or surgery, can be a powerful platform for achieving that goal, aligned to NHG Health's commitment to add years of healthy life to our community," said Associate Professor Karen Ng, Chief Executive Officer, NHG Polyclinics.

¹ Diabetes remission was defined as achieving and maintaining a HbA1c of less than 6.5% without glucose-lowering medications for at least 3 months.

5 Singapore is projected to have up to one million individuals with type 2 diabetes by 2050. Alarming, many are being diagnosed with diabetes at a younger age, in their thirties and forties, leading to a longer duration of the disease and higher risk of developing complications such as heart disease, kidney failure and visual impairment. These place significant and sustained burden on individuals, families and the healthcare system, increasing healthcare costs and straining resources.

6 The clinical trial findings offer a paradigm shift that type 2 diabetes remission can be achieved outside of hospital settings and can reshape how type 2 diabetes is managed in Singapore. Conducted in four polyclinics, this study enrolled adults aged 21 to 60 who had been diagnosed with type 2 diabetes in the past five years and had a body mass index of between 27kg/m² and 45kg/m². A total of 57 participants were recruited into the clinical trial with 26 participants randomly assigned into the control group and 31 participants into the intervention group. The intervention group underwent a dietitian-led structured weight management programme for six months, during which their regular meals were replaced with a very low-calorie total diet replacement for 12 weeks before gradually reintroducing food guided by the dietitian. Dietitians also provided tailored lifestyle coaching to maintain weight loss. Outcomes were compared with the control group receiving usual diabetes care at the polyclinics.

Key findings

7 After 12 months, participants in the intervention group were significantly more likely to be in diabetes remission compared with those who received usual care in the control group. Weight loss was found to be a key factor in achieving diabetes remission. Those who had greater weight loss were more likely to achieve diabetes remission.

Participants in the intervention group:

- Were 5.5 times more likely to achieve diabetes remission, defined as maintaining HbA1c levels below 6.5% without medication for three months, compared with the control group. Specifically, at one-year, 41.9% of participants in the intervention group achieved remission compared with only 7.7% of those receiving usual care.
- Achieved an average weight loss of 5.5% from baseline body weight, compared with the average weight loss of 1.8% in those who received usual care. Greater weight loss was strongly linked to higher remission rates.

8 Associate Professor Tang Wern Ee, Family Physician, Senior Consultant, and Principal Investigator of the NHG Health Diabetes Remission Clinical Trial said, "By adapting the proven UK DiRECT approach to our local context, we have shown that diabetes remission can be a treatment goal for people with obesity and early type 2 diabetes in our local population. The close partnership between family physicians and dietitians was key to the trial's success, providing patients with both medical guidance and nutritional support to drive and sustain lifestyle change."

9 Beyond demonstrating the potential for type 2 diabetes remission without the use of medications, this study also marks a critical step towards strengthening primary care research and advancing chronic disease management in community-based settings rather than hospitals.

REMI-D at NHG Ang Mo Kio and Hougang Polyclinics

10 As a follow-on to the clinical trial, NHG Polyclinics has launched a pilot type 2 diabetes remission programme named 'REMI-D' to assess the feasibility and effectiveness of incorporating behavioural changes in a routine care setting. This programme is currently being piloted at its Ang Mo Kio and Hougang Polyclinics since October 2024 and April 2025, respectively to evaluate how a multidisciplinary team approach can potentially help patients achieve diabetes remission.

11 REMI-D, led by dietitians, offers patients a targeted lifestyle intervention plan based on their acceptance level and readiness. Patients will need to fulfil the eligibility criteria to join the programme for one year. During this period, they will continue to receive routine care from their regular care team at the polyclinics, including doctors and nurses, and be closely monitored.

12 Patients are required to follow an 800kcal meal plan and are given the option to be on either a full meal or partial meal replacement diet at the start. Patients who opt for full meal replacement will have to replace all three meals with a low-calorie drink and be counselled on appropriate food intake at this stage. They will also have their diabetes and hypertension medications stopped or reduced. For those who opt for partial meal replacement, they will have to replace at least one meal with a low-calorie drink and follow individualised plans by the dietitians. These patients will be monitored and have their diabetes and hypertension medications adjusted accordingly. Following from the successful approach used in the clinical trial, patients will be guided to gradually develop sustainable healthy habits to maintain their diabetes remission. Physical activity advice will be customised for each patient.

13 To-date, 39 patients with an average age of 51 have been enrolled in this pilot programme. While a feasibility evaluation of incorporating this pilot programme into regular care for diabetes management is scheduled at the end of 2025, preliminary results are promising. Among 16 patients who have been followed-up for six months, most of them had achieved diabetes remission with an average HbA1c reduction of 1.2% and lost an average of 11% of their baseline weight.

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For media queries, please contact:

Ms Joanne Teo
Corporate Communications Department
NHG Polyclinics
Email: Joanne.Ls.Teo@nhghealth.com.sg

About NHG Polyclinics

NHG Polyclinics is the primary healthcare arm of NHG Health, the regional health manager for the 1.5 million residents of Central and North Singapore.

NHG Polyclinics provides a comprehensive range of health services for the family, functioning as a one-stop health centre providing treatment for acute medical conditions, management of chronic diseases, women and children health services and dental care. The focus of NHG Polyclinics' care is on health promotion and disease prevention, early and accurate diagnosis, disease management through physician led team-based care as well as enhancing the capability of Family Medicine through research and teaching.

Through the Family Medicine Academy and the NHG Family Medicine Residency Programme, NHG Polyclinics plays an integral role in the delivery of primary care training at medical undergraduate and post-graduate levels. The Primary Care Academy provides a one-stop primary care training centre for primary healthcare professionals and the community.

Name Glossary

<p>Associate Professor Karen Ng Chief Executive Officer NHG Polyclinics</p>	<p>黄明燕副教授 行政总裁 国立健保集团综合诊疗所</p>
<p>Ms Imelda Tanoto Member of the Board of Trustees Tanoto Foundation</p>	<p>陈思宏 理事 陈江和基金会</p>
<p>Associate Professor Tang Wern Ee Family Physician, Senior Consultant Director, Clinical Research Unit NHG Polyclinics</p>	<p>董文懿副教授 家庭医生, 高级顾问 处长, 临床医学研究组 国立健保集团综合诊疗所</p>
<p>Diabetes Remission Clinical Trial</p>	<p>逆转糖尿病临床试验</p>
<p>REMI-D</p>	<p>逆转糖尿病计划</p>
<p>NHG Health Fund</p>	<p>国立健保集团基金</p>
<p>NHG Polyclinics</p>	<p>国立健保集团综合诊疗所 Poliklinik Kumpulan Jagaan Kesihatan Nasional தேசிய சுகாதார பராமரிப்புக் குழு பலுதறை மருந்தகங்கள்</p>