

Improving Access to, and Understanding of, Support for People with Type 2 Diabetes Who Want to Put Their Condition Into, or Maintain Remission

Scope

Diabetes UK welcomes applications for research which **seeks to improve access to, and understanding of, support for people with type 2 diabetes who are seeking to put their condition into, or to maintain, remission.**

Background

Type 2 diabetes is influenced by a combination of factors, including genetics, sex, age, and bodyweight: as well as ethnicity, sociocultural, economic, environmental, behavioural and psychological factors, and social inequities. How and where the body stores fat is also a factor in the complex aetiology of type 2 diabetes.

Over the past ten years, research has demonstrated that, when people with type 2 diabetes lose weight (typically around 15kg), excess fat is lost from the liver and pancreas, and these organs can regain function. Sometimes, this process can put type 2 diabetes into remission.^{1,2}

The American Diabetes Association (ADA) international consensus statement defines remission from type 2 diabetes as: HbA1c <48mmol/mol (6.5%) for at least 3 months, without diabetes medication.³ There is now compelling evidence that significant weight loss can lead to remission among some adults living with type 2 diabetes and overweight or obesity.

A review of reviews published in 2022 found 16 weight management intervention studies, five of which showed type 2 diabetes remission to be possible within 12 months. Two RCTs of total diet replacement (TDR – very low energy formula diet) showed high certainty evidence of a median remission rate of 54% at 12 months. One RCT of formula meal replacements showed moderate certainty evidence for an 11% remission rate at 12 months. One RCT of Mediterranean diet showed low certainty evidence for a 15% remission rate at 12 months. Finally, one non-RCT of very low carbohydrate ketogenic diet showed low certainty for an 11% remission rate.⁴ In this review of reviews, the analysis was limited by the relatively small number of studies presenting high quality evidence (RCTs) with remission as a primary outcome.

In the field of bariatric surgery, an international consensus statement in 2016 reported that data from more than 15 RCTs suggest that remission of type 2 diabetes may occur in 30-63% of people with type 2 diabetes in the 1 to 5 years following bariatric surgery.⁵

Type 2 diabetes remission services delivered by NHS England now focus primarily on low-energy, diet-based weight management, as a result of ground-breaking results from the DiRECT trial, funded by Diabetes UK.⁶ Nearly half of the adults with type 2 diabetes who entered and completed the DiRECT programme put type 2 diabetes into remission at 12 months⁶. After two years, around one third experienced that their type 2 diabetes remained in remission.⁶ After five years, less than 10% experienced that their type 2 diabetes remained in remission⁷.

Evidence suggests that greater weight loss improves the chance of remission. Therefore, focusing on the approach that helps an individual to achieve significant weight loss may offer a greater opportunity for remission. In addition, it appears that remission is more likely among those with shorter duration of type 2 diabetes. Therefore, intervening soon after diagnosis may also offer a greater opportunity for remission.

To date, most participants in type 2 diabetes remission studies have been of White European ethnic origin. And while there is some evidence in people from a South Asian background⁸, more research is needed to examine the potential for remission among people from various ethnic backgrounds, particularly those ethnicities associated with higher rates, and earlier diagnoses, of type 2 diabetes.

However, it is clear that there are uncertainties related to the durability of remission; options for programmes to provide ongoing support; and the metabolic, behavioural, psychological, social, cultural, socioeconomic, and environmental factors involved in both attaining and maintaining remission⁹. Additionally, there is a need for a focus on inequalities and representativeness in relevant work and the impact of various intervention types in various underserved groups¹⁰.

The Diabetes Research Steering Groups have identified a number of priorities for research into type 2 diabetes remission, with an overall aim to assist more people with type 2 diabetes to attain and sustain remission, if that is their aim.

Priority areas identified

1. How can access to existing treatments for remission be improved? What are the needs and experiences of people with type 2 diabetes with respect to diabetes remission and weight management services and how can we ensure that services meet the needs of underserved groups?
2. How can support for those attempting to attain and maintain remission be improved – including approaches to ensuring long-term clinical support (post-remission), long-term psychological support and understanding the psychosocial and behavioural mechanisms and impacts of attaining and maintaining remission?

3. Are there new, better, or alternate ways to attain and/or maintain remission, so that this is an option for a wider group of people?
4. What are effective approaches to reduce inequalities in access to remission support for people living with type 2 diabetes in underserved groups?
5. How does stigma impact people with type 2 diabetes in relation to accessing support for, attaining, and maintaining remission, and how can this be addressed?

The research priorities outlined above should be considered alongside three cross-cutting themes, which will be important across each of these priorities. These cross-cutting themes are:

- The role of stigma and whether this prevents people from seeking support and advice on remission. This is of particular importance given the known complexity of diabetes stigma¹¹;
- Person-centredness (including cultural competence of interventions); and addressing inequalities.

Funding

Diabetes UK invites research proposals that address these knowledge gaps in line with our project grant scheme which provides funding of up to £500,000 over five years.

We recognise that type 2 diabetes is prevalent in certain disadvantaged groups and would welcome proposals that address health inequalities in those groups.

Acknowledging this is an understudied area, we are keen to provide seed funding for early-stage research including pilot, feasibility, and qualitative studies, as well as for efficacy and implementation trials, where evidence from early-stage research indicates they are appropriate.

Applicants are encouraged to show evidence of substantial patient and public involvement in all stages of the development and delivery of their project, with recognition that type 2 diabetes disproportionately affects people from minority ethnic groups and those from socioeconomically deprived areas.

Deadline

The deadline for applications is **3 June 2024 17:00 hrs** (funding decisions will be made in October 2024)

How to apply

Apply for a Diabetes UK grant through our online portal and select ***“Improving access to remission of type 2 diabetes”***

For further details please contact the Diabetes UK Research team at research@diabetes.org.uk

Application assessment process

All applications received under this highlight notice will be assessed through the Diabetes UK standard assessment procedure for Project grants and will be considered in competition with all applications submitted.

Applications will be assessed by the scientific panel on the following criteria:

- Potential difference the research will make to the lives of people living with and at risk of diabetes.
- Scientific excellence and potential impact.
- Track record of the applicants.
- Value for money.

Applications will be assessed by the Grants Advisory Panel on the following criteria:

- Relevance to people with diabetes and its potential impact.
- The timescale on which the project could make a difference to people living with and at risk of diabetes.
- The extent of involvement of people with diabetes in the development and the management of the study.

References

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