Overview of the NHS Type 2 Diabetes Path to Remission Programme

The NHS Type 2 Diabetes Path to Remission Programme, formerly known as the NHS Low Calorie Diet Programme, is designed for people with type 2 diabetes within 6 years of diagnosis. It aims to support highly clinically significant weight loss and the potential attainment of diabetes remission (meaning glycaemic levels below the threshold for diabetes, maintained without glucose-lowering medication). It is commissioned centrally by NHS England and is currently available in 21 Integrated Care Boards (ICBs), with a further nine ICBs due to go live in September 2023 and full nationwide coverage expected by 1st April 2024.

The programme features an initial 12-week period of low-calorie, total diet replacement (TDR). During this time, participants replace all food with a micronutrient-complete, specially formulated diet, usually in the form of shakes, soups or bars, comprising a total daily energy intake of 800–900 kcal. Then follows a 6-week period of food reintroduction, with the remainder of the 12-month programme focusing on support with weight maintenance through lifestyle and behaviour change. If 2 kg or more of weight is regained after the initial TDR phase, the participant is offered a further 4 weeks of TDR.

This approach is largely based on two underpinning randomised controlled trials, the Diabetes Remission Clinical Trial (DiRECT) and Doctor Referral of Overweight People to Low Energy total diet replacement Treatment (DROPLET). The former was the landmark trial of using TDR to drive weight loss (typically 10–15 kg) and attain remission of type 2 diabetes, which was achieved in almost half of the intervention group (Lean et al, 2018), while the latter showed that similar weight loss outcomes could be attained using commercial providers to deliver the intervention rather than NHS healthcare professionals (Astbury et al, 2018).

Eligibility criteria

Aligned to these trials, there are a number of eligibility criteria for the Path to Remission programme. These include:

- Duration of diagnosis of type 2 diabetes of less than 6 years.
- Age 18–65 years.
- BMI of 27 kg/m^2 or greater in people from white ethnic groups (adjusted to 25 kg/m^2 or greater in people from Black, Asian and other ethnic groups).
- Not being treated with insulin.
- Most recent HbA_{1c} result (within the last 12 months) of 43–87 mmol/mol if taking glucose-lowering drugs, or 48–87 mmol/mol if not taking glucose-lowering drugs.
- There are a number of other criteria for safety; a full list is detailed on the referral form.

Delivery of the programme

Under the most recent programme iteration, which went live in the first wave of ICBs in June 2023 and is being rolled out nationwide this financial year, people referred are given a choice of one-to-one delivery, either in person or digitally, with built-in facilitation of peer support. The entire programme, including all TDR, is free of charge to participants.

Referrals come from General Practice, with the programme being delivered by commercial providers. For safety, discussion of medication adjustments to take place on starting the programme is an important part of the referral process, as some glucose-lowering medications (e.g. sulfonylureas and SGLT2 inhibitors) and blood pressure-lowering medications may pose safety risks alongside TDR.

The providers are responsible for arranging monitoring of weight, fingerprick blood glucose levels and blood pressure (if indicated) in participants. Measurements are processed by the provider, with defined thresholds for escalation to General Practice if necessary. For non-urgent

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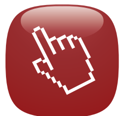

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The evolution and early outcomes of the Healthier You: NHS Diabetes Prevention Programme for people with non-diabetic hyperglycaemia.

Diabetes & Primary Care **23**: 65–7

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clinical matters or queries related to the programme, each provider is required to have a Medical Director for advice and support, limiting the burden on General Practice.

Outcomes to date

Early outcomes from the programme were announced at the Diabetes UK Conference in April 2023. From September 2020, when the programme pilots first launched, to December 2022, there were 7554 eligible referrals to the programme. Contrary to some preconceptions about TDR acceptability, uptake from referral to starting the programme was strong, at 68%, and of those programme starters, 90% remained on the programme for the full duration of TDR and 55% stayed on until its end at 12 months.

The mean weight loss for participants at programme end was 10.9 kg, or 9.8% of baseline body weight. Analyses of remission rates, using data extracted through the National Diabetes Audit, are eagerly awaited and will follow; however, the weight loss reported for those completing the programme is comparable to the intervention groups in the trials on which the programme is based. This is encouraging for the potential of the programme, delivered at scale and across the nation, to support remission of type 2 diabetes. ■

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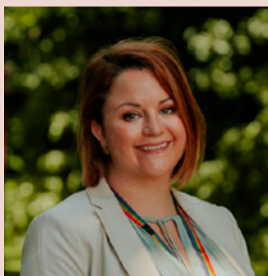
How can we increase uptake of the Type 2 Diabetes Path to Remission programme?



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Fundamentally, if any diabetes intervention is to succeed, an element of behaviour change will always be required (McSharry et al, 2020). Even with access to interventions that can help people to achieve their weight loss goals and increase insulin sensitivity, behaviour change in the form of dietary modification, increased physical activity and reduction of health-compromising behaviours (e.g. smoking, drinking, stress, poor sleep) is essential to maximise positive gains and to ensure weight loss maintenance in the event that the intervention is ceased (Paixão et al, 2020).

The level of behaviour change required for the very-low-calorie diet that comprises the first stage of the diabetes remission programme is significant, and can feel daunting for those who are considering embarking upon it. However, there are a number of techniques that can be used within primary care settings in order to improve behaviour change and, ultimately, increase uptake of the programme.

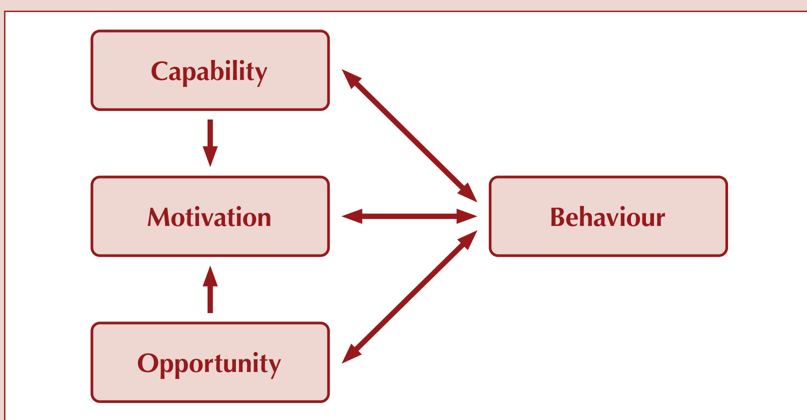

Figure 1. The COM-B model of behavioural change.

What does the science tell us about behaviour change?

The success or failure of behaviour-change approaches hinge on a number of factors, both within and external to the person attempting to change. These factors are described in the COM-B model (*Figure 1*), which recognises that, in addition to being motivated to make changes, people need to have both the capability (e.g. the understanding, skills, finances, physical ability) and the opportunity (e.g. time, childcare, physical equipment, space) to enact the change (Michie et al, 2014). The COM-B model can be applied at a number of levels via

use of the Behaviour Change Wheel (*Figure 2*), which covers areas such as government policy, food security and town planning. Ultimately, it is these multi-levelled approaches that hold the key to solving complex public health issues such as type 2 diabetes and weight management, but these of course take time as well as significant political and financial resources to achieve, and so it is essential that services continue to support behaviour change on the individual and family level.

When working to achieve behaviour change at the individual level, a fundamental requirement is that of self-efficacy (Bandura, 1982). Self-efficacy is a person's belief in their ability to succeed in specific situations or accomplish a task, which in turn affects their motivation, effort and persistence. People with high self-efficacy are more likely to set challenging goals, work hard to achieve them and persevere in the face of setbacks. It is a complex construct that is influenced by a variety of factors, including past experiences, social support and physiological factors.

It is likely that many people living with type 2 diabetes who have not already been able to successfully enact behaviour changes will have low self-efficacy (Aljasem et al, 2001), which may have stemmed from a number of different sources. There is strong evidence that many people living with type 2 diabetes and/or obesity have experienced multiple adverse childhood events, which in turn affect psychological, physiological and behavioural development (Wiss and Brewerton, 2020). People may have tried and failed to manage their weight in the past, leading them to believe that failure is inevitable, or to have beliefs about their physical and/or genetic capability to lose weight.

Furthermore, many people will have experienced stigma or bullying around their weight or their type 2 diabetes (Browne et al, 2013) – unfortunately, often as a direct result of interacting with health services and healthcare professionals (Himmelstein and Puhl, 2021) – which serves only to increase psychological distress and reduce self-efficacy. Healthcare-based stigma can have particularly detrimental effects and needs to be avoided wherever possible; see the *Language Matters: Obesity* joint consensus statement for useful guidance on sensitively approaching conversations about shape and weight (Albury et al, 2020).

It is important to note that there is no one-size-fits-all approach to increasing self-efficacy. The most effective approach will vary depending on the individual and the behaviour they are trying to change. However, the approaches outlined here have been shown to be effective in a variety of settings and with a variety of behaviours.

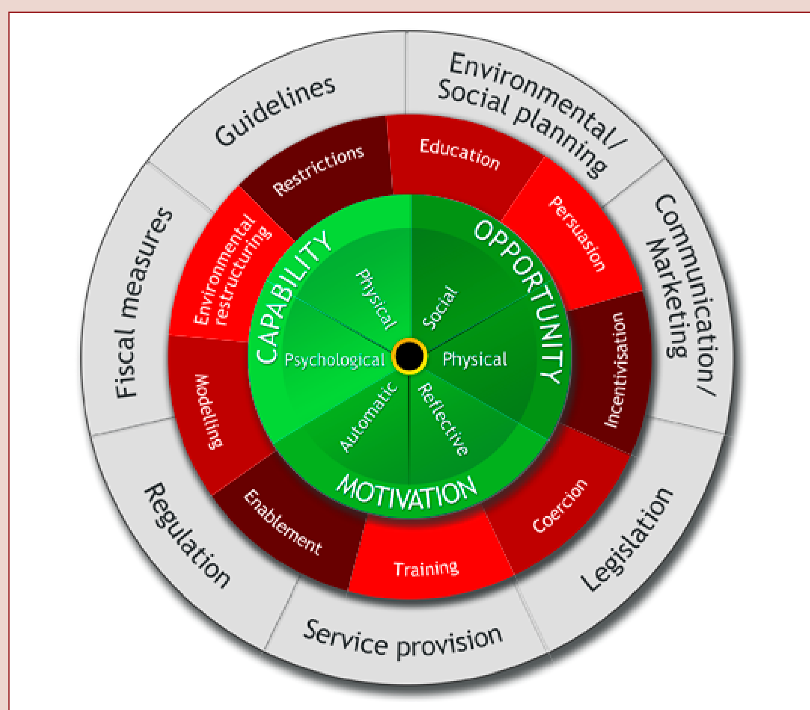

Figure 2. The Behaviour Change Wheel (Michie et al, 2014). Click on the image to access an interactive version at http://www.behaviourchangewheel.com.

Applying behaviour change principles to increase the uptake of and adherence to the Path to Remission programme

1. **Build personal importance:** Get the person to talk about why remission is something they want. What would improved health and fitness bring them? Why is this important to them?
2. **Peer support:** Holding information sessions in a group format can help to reduce stigma,

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model positive behaviour and develop peer support. Setting up peer support groups for those on the remission programme may also prove beneficial

3. **Anticipate anxiety and ambivalence:** Prepare responses to commonly asked questions and validate concerns. Video testimonials from previous participants and "taster events", where participants get to ask questions and taste the dietary supplements, may help to increase uptake.
4. **Provide and collect data:** Provide regular data on weight loss and get the person to track other metrics of importance to them (e.g. walking distance). Emphasise and celebrate any progress, no matter how small.
5. **Make it easy:** Ensure sessions run in an easily accessible location with good public transport links. Consider community venues such as leisure centres, which could also prompt people to think about engaging in exercise. Ensure easy pathways are in place for ordering and collecting dietary supplements.

After the programme: Techniques to keep positive behaviour change going

Goal setting

Goals need to be clear and ideally set by the person to give them a sense of understanding and ownership. While a significant level of change may be required in order to achieve longer-term health outcomes, it is important to create sub-goals and break them down further into small, manageable steps in order to increase the all-important feeling of mastery as well as reducing feelings of overwhelm.

The 7Rs approach

The 7Rs approach to lasting behaviour change (Harris, 2022) provides a checklist of factors that can be utilised in order to maximise the chances of behaviour change being adopted and maintained in the longer term. They are:

- **Reminders:** This could be a reminder of why the behaviour is important, or of the attributes a person is trying to develop (e.g. persistence), or a reminder as literal as leaving the gym kit next to the front door.
- **Routines:** Establishing a routine helps the behaviour to become automatic and thereby less vulnerable to emotionally based decision making.
- **Rewards:** Any positive feedback, whether it be meeting a milestone, compliments from others or a tangible award (e.g. certificates or medals), will reinforce the behaviour.
- **Recording:** Logging both the incidence of the behaviour and the impact on outcomes will reinforce the importance, increase accountability and help people to reflect on their journey.
- **Relationships:** These can provide support, encouragement, modelling from others engaging in similar positive behaviour change and accountability (e.g. from a gym buddy or sponsor).
- **Reflect:** What's going well? What went wrong? Think in advance of previous successes and failures and use these to create coping strategies in advance. Reflect on why this is important for the person.
- **Restructuring:** Changing the environment around the person in order to make it easy to do the right thing (e.g. pre-preparing healthy snacks). ■

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