DIPLOMA and Re:Mission. The value of real-world evaluation in improving diabetes care

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In the last decade NHS England have launched two significant diabetes programmes in response to the concerning increases in the prevalence of type 2 diabetes (T2DM) and the resulting financial and health impact.1 These services are the NHS Diabetes Prevention Programme (NHS DPP), which was first rolled out in 2016 as a pilot programme,2 and reached national coverage in 2018,3 and the NHS Low Calorie Diet programme, which was launched as a pilot programme in September 2020 and was rolled out nationally in June 2023 as the Type 2 Diabetes Path to Remission (T2DPR).4 Both programmes were based on robust trial evidence: the NHS DPP was informed by diabetes prevention trials worldwide,5-10 and the T2DPR was informed by the Doctor Referral of Overweight People to Low Energy total diet replacement Treatment (DROPLET)11 and Diabetes Remission Clinical Trial (DiRECT) trials.12 These studies were extremely important in establishing the safety and efficacy of these approaches but the evidence was limited concerning participant diversity and the delivery models that needed to be adapted to facilitate real-world delivery at a national scale. Real-world evaluation of these programmes was therefore critical in informing the safe and equitable implementation across our broad and diverse populations, and ensuring effective delivery within the constraints and competing demands of local health systems.

The DIPLOMA and Re:Mission studies were funded by the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research, to undertake a real-world mixed-method evaluation of the NHS DPP and T2DPR, respectively.13,14 The aims and methods of the two studies were broadly similar, which facilitated cross-study comparison and learning. Both sought to deliver a comprehensive, mixed-method evaluation of these interventions, and to understand long-term cost-effectiveness and issues of equity, acceptability and implementation.15,16 The teams’ ability to be responsive and flexible to real-world changes, and to provide critical learning by bringing together quantitative data, models of behaviour change and qualitative insights, supported by extensive public and patient involvement and engagement, were fundamental to these evaluations.16,17

Both studies highlighted variation in the use of behavioural theory and behaviour change techniques across the programmes, which resulted in challenges to programme fidelity during real-world implementation.18-22 The use of similar methods to evaluate fidelity-enabled comparison of findings across studies addressed a major limitation in the fidelity literature to date. This also facilitated shared learning in which the research teams were able to work with NHS England to improve the behaviour change content in future commissioning rounds of both national programmes.28,33

The NHS DPP and T2DPR are both delivered by commercial service providers, to reduce the burden on the NHS and add capacity to NHS services.23 It took time for both research teams to understand the contexts in which these service providers operated, each with their own staff and systems. This analysis identified common practical challenges such as: (1) the time taken to gain data access, and the impact this has on learning and funding timeframes; and (2) the variation in the level of engagement across commercial service providers commissioned to deliver the programme, and the impact this may have on project timelines, staff resource and parity in data collection.

Our collective research suggested practical ways to increase uptake of these programmes in primary care, including clear discussions about their value to patients and referral staff.24-28 This learning also reflected broader trends in behavioural interventions, where referral, uptake and retention of both programmes varied according to patient socio-demographics.29-40

The Re:Mission findings suggest ways for local health services to address the challenge of health inequalities: adoption of an equity perspective at the outset of any new service mobilisation, managing resources equitably from the start and then monitoring ongoing impact on inequality to further target resources.41 Person-centred care was found to be critically important. This must include referral opportunities and programmes that are culturally competent and tailored to the needs of local populations. Therefore qualitative patient insights will provide important context and understanding, and
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will be brought together in six papers to be published simultaneously online in *The British Journal of Diabetes* in April. These papers will showcase the patient insights and learning from the Re:Mission study.

Meeting health challenges in the future is likely to require more large-scale programmes to encourage health behaviour change at scale across our diverse population. The DIPLOMA and Re:Mission evaluations may provide a useful model for evaluation of such programmes.

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