# The NHS T2Day (Type 2 Diabetes in the Young) programme: Addressing unmet need, improving awareness and building evidence

ver recent years, there has been increasing recognition that people developing type 2 diabetes at younger ages tend to have a more aggressive phenotype, and often very different needs, to those developing type 2 diabetes later in life. They are more likely to be living with obesity (NHS England, 2023a), experience symptoms of depression and diabetes-related distress (Barker et al, 2023a), and have early development and accumulation of the complications of diabetes (TODAY Study Group, 2021). The majority are managed solely in general practice.

Concerningly, the prevalence of type 2 diabetes is growing proportionately fastest in these younger ages. There were around 140 000 people under 40 with type 2 diabetes in the National Diabetes Audit in 2021/22, an increase of 18.7% over the previous 5 years, compared to an increase of 11.3% in those aged 40–79 years (NHS England, 2023a). The development of type 2 diabetes at younger ages is also subject to marked inequalities, with those affected being much more likely to have minority ethnicity (particularly Asian) and to be living in areas of socioeconomic deprivation than those who develop diabetes at older ages.

In the most recently published National Pregnancy in Diabetes Audit report, the number of pregnancies in women with type 2 diabetes surpassed the number in women with type 1 diabetes for the first time (NHS England, 2023b). Rates of adequate preparation for pregnancy were worse in women with type 2 diabetes than in those with type 1 diabetes (9.5% and 17.6%, respectively), with clear disparities by socioeconomic deprivation and ethnicity, and there were higher rates of serious adverse pregnancy outcomes (6.6% and 5.1%, respectively), including birth defects and baby deaths. While trends for pregnancy outcomes

in women with type 1 diabetes seem to be improving, they appear to be getting worse for those with type 2 diabetes.

## Higher risk yet lower measures of care

The impact of developing type 2 diabetes earlier in life can be catastrophic, with a higher lifetime risk of complications (Lascar et al, 2018), greater relative risk of mortality (Barker et al, 2023b), a tendency for more rapid deterioration in glycaemia (Steinarsson et al, 2018) and a worse cardiometabolic risk profile than generally seen with older onset (Wright et al, 2020). It is estimated that type 2 diabetes results in around 12 years of life lost if developing in someone's teenage years and around 7 years lost if in their 20s or 30s, compared to 4 years lost if diagnosed in their 50s and no years lost if aged over 80 (Sattar et al, 2019).

However, despite these vastly elevated risks associated with younger onset, objective measures of care actually tend to be worse for people with type 2 diabetes aged under 40 than for older people, with lower rates of completion of care processes and generally lower attainment of NICE standards for HbA<sub>1c</sub> and blood pressure. The reasons for this are likely multifactorial, including complex biopsychosocial drivers in addition to systemic care-related barriers, such as timing of appointments, one-size-fits-all models of care delivery and competing pressures within time-constrained contacts.

### **Enter the T2Day programme**

In response to this, the Type 2 Diabetes in the Young (T2Day) programme was developed by NHS England and announced in June 2023. Every Integrated Care System (ICS) in England has put itself forward to participate, recognising the marked inequalities relating to type 2 diabetes



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#### At a glance factsheet: Early-onset and youthonset type 2 diabetes

A quick guide to the characteristics, implications and management of type 2 diabetes occurring in younger adults, children and adolescents.

*Diabetes & Primary Care* **23**: 69–70

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at younger ages and the clear need for change to improve outcomes.

The programme is designed to provide additional clinical support to adults aged under 40 with type 2 diabetes, tailored to their individual needs. This includes key core components, such as completion of remaining care processes; optimisation of glycaemia, blood pressure and cardiovascular risk; help with managing weight; support for psychosocial needs; and, in women, discussion of contraception and planning for pregnancy.

However, the intent is not for a T2Day review to be a "tick-box" exercise. Rather, there should be sufficient time to focus on particular unmet needs, guided by the priorities of the person with diabetes. For some, this may relate to accessing more intensive support to manage their weight. For others, it may be that help with their psychological wellbeing is most important to them, or the main priority is planning for a healthy pregnancy.

The existence of the programme itself, as well as supporting resources and information, may also help clinicians in having greater awareness of the unique needs and considerations for young people with type 2 diabetes. For example, current NICE NG28 guidance emphasises the importance of setting individualised HbA<sub>1c</sub> targets (NICE, 2022); given the high lifetime risk of complications, aiming for more intensive targets may be appropriate for many people with young-onset type 2 diabetes, in contrast to universally applying the target used by the Quality and Outcomes Framework (QOF).

## Adapting to local needs and generating evidence

The approach to rolling out the T2Day programme has been deliberately flexible; the core components of a review are required but everything else can, and should, be adjusted to local need and context. How the service is commissioned, the delivery model, who provides it, service timing and locations, how people are

engaged, and what the service includes (over and above core components) are all for local determination. Comprehensive supporting guidance has been provided to each ICS as a template, to be tailored according to local needs, services and pathways.

This diversity in implementation will also be helpful in developing the evidence base. Currently, there is little objective evidence relating to the clinical and cost effectiveness of different approaches. Through both quantitative and qualitative evaluations, including drawing upon the data and insights of interested ICSs, we hope to better understand what works better in whom, as well as the how, where and when, with the aim of supporting evidence-based commissioning and driving the delivery of effective, person-centred support for younger people with type 2 diabetes for years to come.

If you would like to explore how you could support delivery of the T2Day programme to your population, or would like to learn more about the approach being taken in your ICS, please contact your local diabetes lead for more information.

Barker MM, Davies MJ, Zaccardi F et al (2023a) Age at diagnosis of type 2 diabetes and depressive symptoms, diabetes-specific distress, and self-compassion. *Diabetes Care* **46**: 579–86

Barker MM, Davies MJ, Sargeant JA et al (2023b) Age at type 2 diabetes diagnosis and cause-specific mortality: Observational study of primary care patients in England. *Diabetes Care* **46**: 1965–72

Lascar N, Brown J, Pattison H et al (2018) Type 2 diabetes in adolescents and young adults. *Lancet Diabetes Endocrinol* **6**: 69–80

NHS England (2023a) National Diabetes Audit 2021–22, Young People with Type 2 Diabetes. Available at: https://bit.ly/3RCAEth

NHS England (2023b) National Pregnancy in Diabetes Audit 2021 and 2022 (01 January 2021 to 31 December 2022). https://bit.ly/47|Uelf

NICE (2022) Type 2 diabetes in adults: management [NG28]. Available at: <a href="https://www.nice.org.uk/guidance/ng28">https://www.nice.org.uk/guidance/ng28</a>

Sattar N, Rawshani A, Franzén S et al (2019) Age at diagnosis of type 2 diabetes mellitus and associations with cardiovascular and mortality risks. *Circulation* **139**: 2228–37

Steinarsson AO, Rawshani A, Gudbjörnsdottir S et al (2018) Short-term progression of cardiometabolic risk factors in relation to age at type 2 diabetes diagnosis: A longitudinal observational study of 100,606 individuals from the Swedish National Diabetes Register. Diabetologia 61: 599–606

TODAY Study Group (2021) Long-term complications in youth-onset type 2 diabetes. N Engl J Med 385: 416–26

Wright AK, Welsh P, Gill JMR et al (2020) Age-, sex- and ethnicity-related differences in body weight, blood pressure, HbA<sub>1c</sub> and lipid levels at the diagnosis of type 2 diabetes relative to people without diabetes. *Diabetologia* **63**: 1542–53