DIABETES UK
KNOW DIABETES. FIGHT DIABETES.

REVERSE THE TREND

Reducing type 2 diabetes in young people

CONTENT

FOREWORD

Drastic changes to the environments we live in and the food we eat over the last 25 years are taking a toll on our health. We are bombarded by adverts for cheaper, unhealthy food. The foods on our shelves are increasingly high in fat, salt and sugar. And rising costs are pushing a healthy diet out of reach for millions. These conditions, combined with genetic factors and stark inequalities, are driving rising levels of obesity, which increases the risk of developing type 2 diabetes.

Once considered a condition of older age, type 2 diabetes is now rising at a faster rate in people under the age of 40, than those over 40. There are now almost 168,000 people under 40 with a diagnosis of type 2 diabetes in the UK[1]. And worryingly many thousands more young adults are likely to be living with undiagnosed type 2 diabetes. The impact is felt disproportionately by those on the lowest incomes and people from Black and South Asian backgrounds.

Now we can see the full impact and injustice of this trend. When type 2 diabetes develops at a younger age, defined here as under 40, it is more acute and aggressive. It is associated with an increased risk, and more rapid onset, of devastating complications such as heart disease, kidney disease, sight loss, and even early death. Developing type 2 diabetes at a younger age can also bring additional challenges to managing blood glucose levels, for instance in the workplace or during pregnancy. This all plays a role in further exacerbating poorer health outcomes and life chances for those affected and their families. Improving the outcomes for people who develop type 2 diabetes under 40 will require a tailored support offer that recognises the unique difficulties in managing this condition.

Diabetes harm does not just affect individuals, it has wide-reaching social and economic impacts. It is contributing to rising long-term sickness, with record numbers now unable to work due to the condition, and too often, it leads to complications and multiple conditions, which devastate lives and are costly to treat and manage.

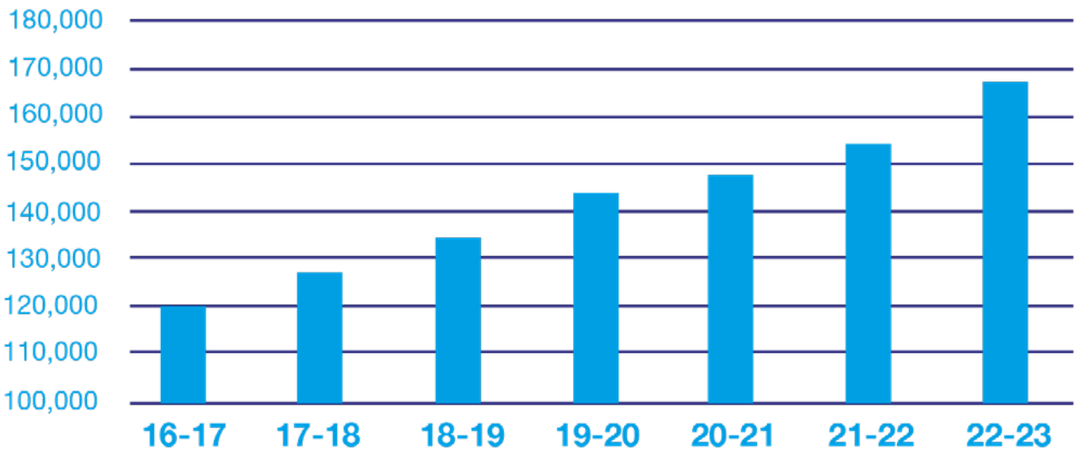
The decisions taken now will not only determine the health of young people today, but also the next generation. Alongside high-quality care for people living with diabetes, we need bold government action to overturn our broken food environment and give every child the best possible chance to grow up in good health. This report sets out recommendations for the practical and achievable steps needed to reduce the harm and reverse the rising trend in rising type 2 diabetes.

Colette Marshall,
Chief Executive, Diabetes UK

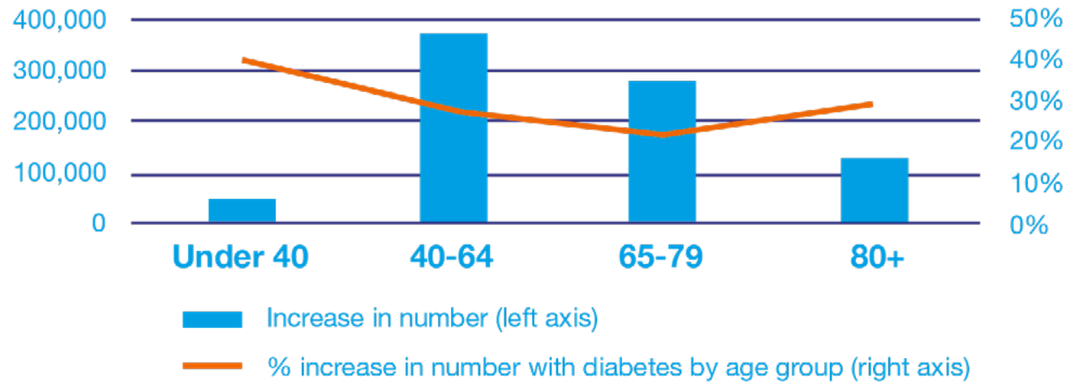
1 NEW FRONT IN THE FIGHT AGAINST TYPE 2 DIABETES

The rise in type 2 diabetes in younger people is a stark warning that our environments and living conditions are causing increasing damage to our health. Until 25 years ago, type 2 diabetes in children had never been identifed in the UK, but it is now rising rapidly.[II] The number of people under 40 diagnosed with type 2 diabetes has risen by over 47,000 since 2016/17, an increase of 39%, compared to an increase of 25% for those over 40.[III] We estimate nearly 168,000 people under the age of 40 are diagnosed with type 2 diabetes in the UK, with nearly 150,000 people under 40 diagnosed in England alone.

Number of people in the UK under 40 registered with type 2 diabetes by year[IV]



Increase in number of each age group registered with type 2 diabetes in the UK, 2016/17 - 2022/23[V]



Thousands more are living with the condition undiagnosed. While older adults are still more likely to have type 2 diabetes, younger adults with type 2 diabetes are more likely to be undiagnosed. Recent ONS analysis of data in England suggested that 50% of those aged 16 to 44 years with type 2 diabetes are undiagnosed, compared with 27% of those aged 75 years and over.[VI]

50% of 16 to 44 year-olds with type 2 diabetes are estimated to be undiagnosed.

The demographic and clinical differences between those that develop type 2 diabetes at an older age, and those under 40, must be understood and used to inform our approach to both prevention and care.

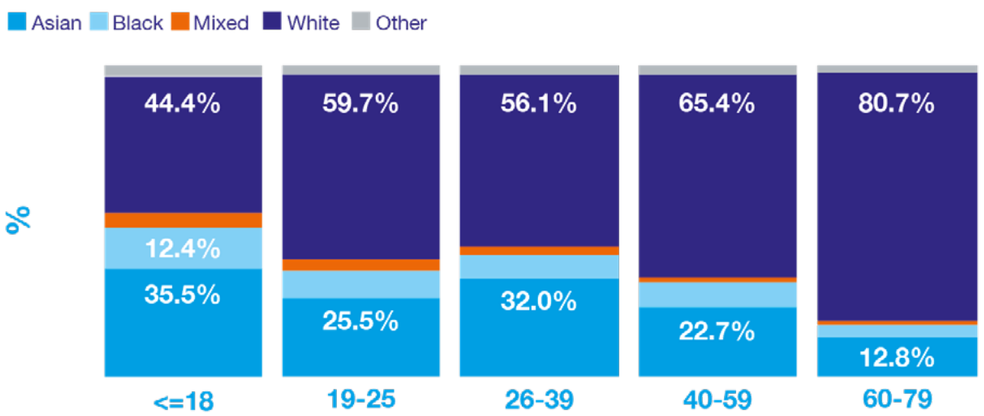
The causes of type 2 diabetes are complex with many factors such as age, family history, ethnicity and socio-economic background all contributing to someone's risk. Living with obesity also increases the risk of developing type 2 diabetes, with risk heightened for those at a younger age. People with type 2 diabetes under 40 are more likely to be living with obesity than those in older age groups. This is especially pronounced in children. 81% of children registered with type 2 diabetes aged 18 and under are living with obesity and 10% with overweight[VII], demonstrating the need for bold action to reduce childhood obesity by tackling the root causes.

Having gestational diabetes also increases the risk of developing type 2 diabetes after birth. Analysis reported in the the BMJ found that women with a history of gestational diabetes had a near 10-fold higher risk of developing type 2 diabetes compared to those who had not had gestational diabetes in pregnancies.[VIII] Only by understanding the complex causes of type 2 diabetes, and taking both population level interventions and improving support for individuals, can we

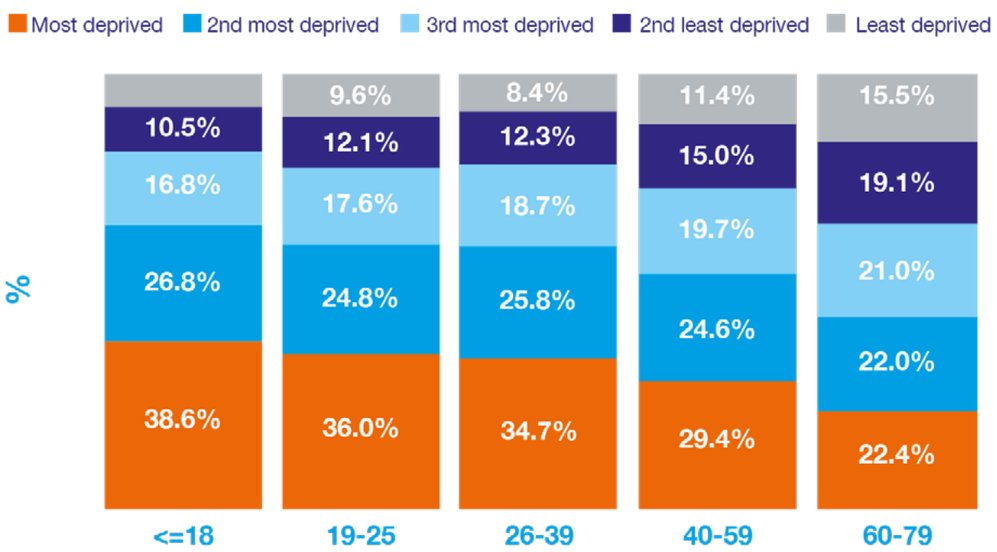
stop the rising prevalence. Gross inequalities exist in type 2 diabetes risk and prevalence, with people from the most deprived areas and people from Black and South Asian backgrounds more likely to develop the condition. This inequity is exaggerated at younger ages. Children under 18 in the most deprived areas are more than 5 times more likely to develop type 2 diabetes than those in the least deprived areas.[IX.] And more than a third of adults under 40 with type 2 diabetes are from the most deprived quintile in England. Of those aged 26-39 with type 2 diabetes, 32% are from Asian backgrounds and 7% are Black, much higher than the proportion of the general population from these backgrounds (12% and 4% respectively).[X.]

Characteristics of people with type 2 diabetes in England and Wales by age group, 2021/22[XI.]

Ethnicity



Deprivation



MORE THAN A THIRD OF ADULTS

under 40 with type 2 diabetes are from the most deprived quintile in England.

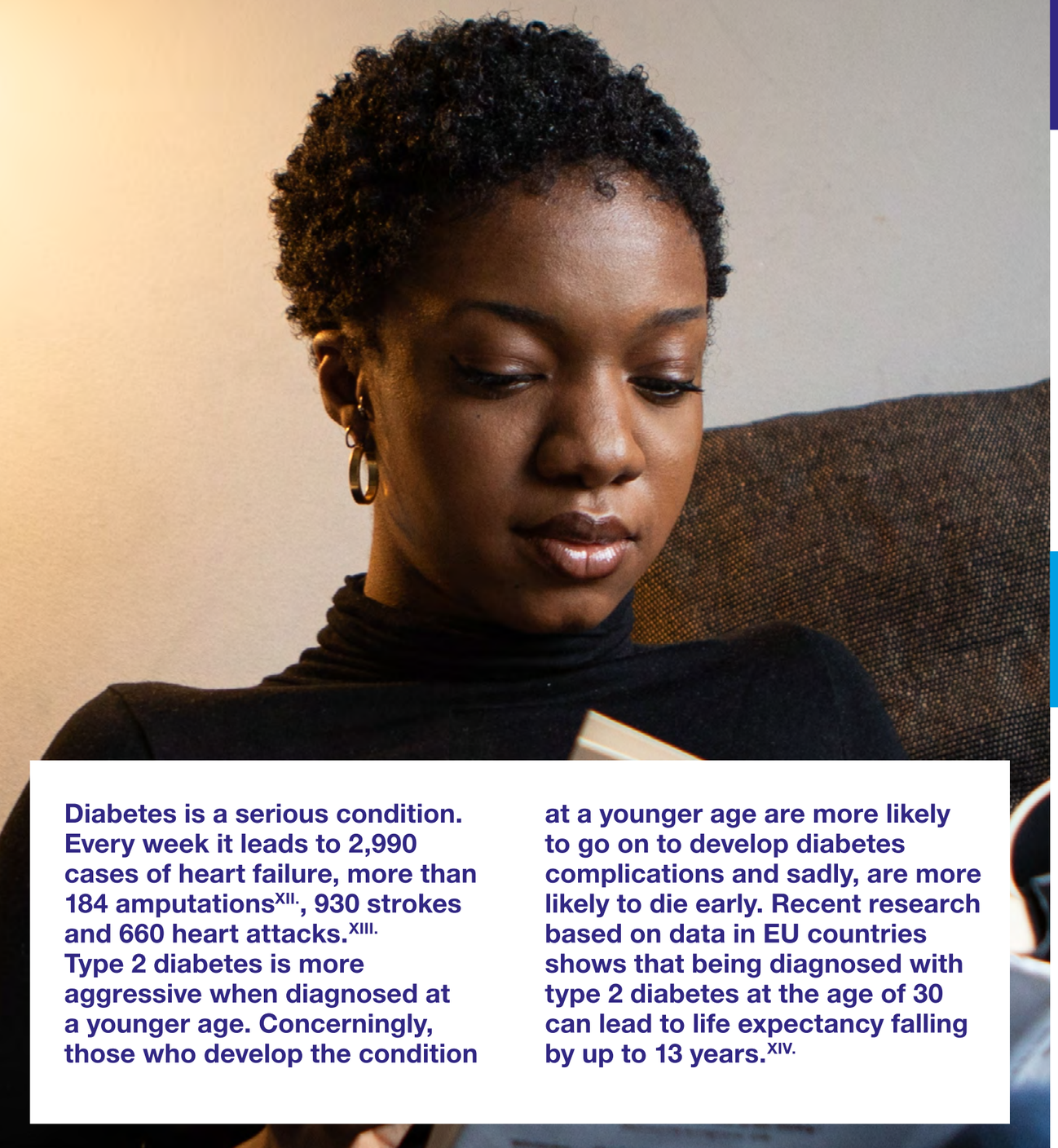
Children in the most deprived areas are more than

5 TIMES MORE LIKELY

to develop type 2 diabetes than those in the least deprived areas.

The link between deprivation and type 2 diabetes is well-established. Access to an affordable, healthy diet, quality housing and green space are protective factors, helping to reduce someone's risk. While those on benefits or low incomes are instead more likely to be reliant on unhealthy foods which are cheaper per calorie, and contain higher levels of fat, salt and sugar. For those already living with diabetes, financial hardship can make it harder to manage the condition. Last year, we surveyed people living with diabetes asking whether they experienced difficulties managing their condition during 2022. Of those who experienced difficulties, people aged 18-45 were nearly twice as likely as older respondents to attribute them, at least in part, to the cost of living (51% and 27% respectively).

AGGRESSIVE FORM OF TYPE 2 DIABETES



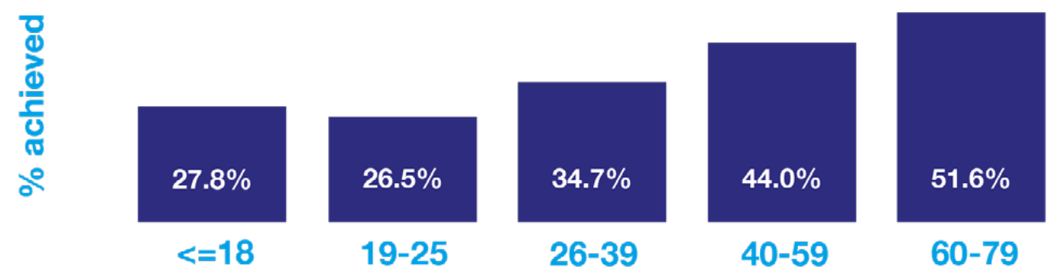
Diabetes is a serious condition. Every week it leads to 2,990 cases of heart failure, more than 184 amputations[XII.], 930 strokes and 660 heart attacks.[XIII.] Type 2 diabetes is more aggressive when diagnosed at a younger age. Concerningly, those who develop the condition at a younger age are more likely to go on to develop diabetes complications and sadly, are more likely to die early. Recent research based on data in EU countries shows that being diagnosed with type 2 diabetes at the age of 30 can lead to life expectancy falling by up to 13 years.[XIV.]

Being diagnosed with type 2 diabetes at the age of 30 can lead to life expectancy falling by up to 13 years.

High-quality diabetes care helps to prevent these life-changing complications, by ensuring people are on the right medications to manage their condition and detecting the early signs of complications, when they are most treatable. As the number of people developing type 2 diabetes under the age of 40 rises, we must take urgent action to improve their health outcomes. Currently, children, adolescents and younger adults are less likely to receive all of their recommended health checks than older people in England and Wales, leaving them at increased risk of complications.[XV.]

Overall, younger people with type 2 diabetes are also less likely to meet all the treatment targets, which are used to measure diabetes management and are associated with better health outcomes.[XVI.] This includes the blood pressure target and HbA1c target, which measures blood glucose levels over time. Those in the most deprived areas were the least likely to meet the HbA1c target.

Percentage of people with type 2 diabetes in England and Wales who have received all 8 care processes by age, 2021/22[XVII.]



I'm 45, quite young for the complications to hit. I was diagnosed with type 2 diabetes at 21, following a difficult childhood, an eating disorder and polycystic ovary syndrome (PCOS).

It took a long time to get a type 2 diabetes diagnosis and to be started on metformin. If I hadn't had the support of my parents and access to the internet, I would have probably been hospitalised, not knowing what was going on until I had a serious diabetic emergency. I was basically told go away, lose weight initially.

My living situation has been difficult to deal with. I'm 45 years old and live in what is called an extra care complex. It's basically like sheltered housing, but it's got carers in house and safety mechanisms. That's how serious it's got for me, that I can't live out in the community anymore. It's safeguarding basically because I fall a lot. I suffer with regular blackouts, and many other complications from my diabetes including neuropathy. I also have pancreatitis.

My symptoms got so severe I became unable to sit at my desk. In 2020, I had to give up work. I absolutely loved my job on the parking team for the local council, helping people like me who have limited mobility independence. I hoped that by going part time, I would alleviate that. But unfortunately, it became much worse. I tried voluntary work just a couple of hours a week and managed that for between six months and a year. The pancreatitis then started to lead to hospital admissions and unfortunately, I'm still trying to get back from that.

Sarah, diagnosed with type 2 diabetes aged 21

IMPACT ON WORK

Diabetes complications can limit someone's ability to live their life as they choose. Now, as type 2 diabetes rises in working aged people, there has been a sharp increase in the number of people unable to work. There are now 43,000 people out of work due to long-term sickness primarily because of their diabetes, a 79% increase since 2019. Diabetes is also listed as a secondary condition for hundreds of thousands more people who are currently unable to work.[XVIII.]

Complications, such as heart failure, angina and major amputations are more common amongst people with type 2 diabetes in the most deprived communities.[XIX.] When these complications force people to stop working, the impact can be felt by the entire family, particularly children, whose life chances – and health – can suffer. This creates a vicious cycle. It is therefore a significant concern that the burden of ill health and lost economic productivity falls disproportionately on our most deprived communities, exacerbating inequalities.

I was diagnosed with type 2 diabetes at 27. It was actually me who mentioned the possibility of diabetes to the GP as I was quite thirsty and peeing a lot. I was sent to the local hospital, and they gave me so much good advice. But over the years I struggled with my weight and for a long time my HbA1c was in the hundreds.

Diabetes complications started to catch up with me when I had a blocked artery in my heart in 2019. And then last year I was in hospital seven times because of complications with my feet.

Since then, I've spent 41 days in hospital, in total, that really has a huge impact on you and the whole family.

I'm quite fortunate to have my wife Tina but this has been really hard for her because she's not the best with hospitals, she's had to try and hold the house together, and the children help and stuff.

Then you lose your money as well - I'm a self-employed bookkeeper. I've been employed before in various accountancy firms but with my illness, and surgery, I've had to give up work at the moment which is really tough.

Paul, diagnosed with type 2 diabetes aged 27

TYPE 2 DIABETES AND PREGNANCY

A devastating consequence of the rise in type 2 diabetes in younger people is the increase in adverse pregnancy outcomes. Managing diabetes in pregnancy can be extremely difficult, and the condition can put both mother and baby at a higher risk of serious complications during pregnancy and childbirth.

As more people develop type 2 diabetes at a younger age, the number of pregnancies in people with the condition is rising. People with type 2 diabetes now account for more than half (55.7%) of all pregnancies amongst people with diabetes, up from 47% in 2014.[XX.]

- Over one third of pregnancies (36.5%) for women with type 2 diabetes were for women in the most deprived areas of England and Wales, compared to 6.5% in the least deprived areas.

- Over half (52.6%) of pregnancies amongst women with type 2 diabetes are women from minority ethnic backgrounds (excluding White minorities).

- The median age of pregnant women with type 2 diabetes is higher than those with type 1 (35 compared to 30).

People from deprived areas and of Asian and mixed ethnicity are disproportionately likely to develop type 2 diabetes under 40, so too are they more likely to experience serious pregnancy and neonatal outcomes. Effectively supporting people with diabetes before and during pregnancy is vital to tackle inequalities in maternity care and outcomes.

Over time, with improved support and use of technology, pregnancy outcomes have been improving for women with type 1 diabetes, but this is not the case for women with type 2 diabetes. Rates of serious outcomes – including miscarriage, stillbirth or neonatal death and birth defects – increased in 2022 to 5.9% for women with diabetes – 5.1% for women with type 1 and 6.6% for women with type 2.[XXI.]

Diabetes in pregnancy can also have an intergenerational impact. Children born to mothers with diabetes are at higher risk of developing obesity or type 2 diabetes later in life. High-quality support to manage diabetes before and during pregnancy is therefore essential, not just for the mother, but also the baby's long-term health.

When we first got pregnant with our daughter, I had gestational diabetes. And I didn't think anything of it, I just thought it was a part of my pregnancy. I never had a follow up blood test, which I know you're meant to have, but I never did. We fell pregnant again in 2021. Again, I was told I had gestational diabetes and was put on insulin. But unfortunately, we lost our baby at 23 ½ weeks.

After speaking to doctors and consultants, they said the main reason why we'd lost our daughter was because I actually had undiagnosed type 2 diabetes.

That was quite hard for me to hear. I felt like I failed my baby because I hadn't taken it more seriously after I'd had my first baby, I hadn't got my blood glucose levels checked, or had a doctor flag I needed to get them checked. That was a big turning point, it was devastating to have to go through that.

Jade, diagnosed with type 2 diabetes aged 28

2 REVERSING THE TREND FOR THE NEXT GENERATION

In recent decades we have seen a trend of increasing harm from type 2 diabetes in young people. Both in terms of the number of people affected and the serious negative health outcomes for those with the condition. Reversing this trend will require a two-pronged approach to reduce the prevalence of type 2 diabetes and to improve support so that people can live well with the condition. The following section outlines the action needed from government and health systems to do this.

Establishing the building blocks of health

The link between deprivation and type 2 diabetes is stark; it shows how the circumstances in which we are born, grow, live and work shape our long-term health outcomes. We therefore need to ensure that the building blocks of health are in place for every child, including quality housing and access to healthy food, active travel routes and green space.

As it stands, children are growing up in a food environment which undermines their health at every turn, but cross-government action could change this for the next generation. We need the places we live in to make it as straightforward as possible for people to eat healthily and live healthy lives, and this means fixing our broken food landscape.

It will require legislation to drive reformulation to make the food on our shelves healthier, tackle food deserts in our most deprived areas, and curb the aggressive marketing tactics that drive us towards unhealthy foods. Without these interventions, children, particularly in our poorest communities, will continue to be let down, bombarded with adverts for unhealthy foods and with the most affordable food the least healthy.

BLAME AND STIGMA

For decades, attempts to reduce obesity and its health impacts have tended to place the focus for action on individuals, ignoring the structural and environmental factors that shape our lives.

Rather than make necessary changes to our food environment and tackle the unaffordability and inaccessibility of a healthy diet, decision-makers have instead leaned on attempts to change individual behaviour. As the increasing prevalence of obesity and associated conditions like type 2 diabetes shows, this approach has failed. Not only does this approach lead to ineffective policymaking, it also entrenches stigma, which can further harm people's health. Stigma prevents people from reaching out for the care and support they need, makes it harder to live with a health condition and impacts people's wellbeing. One example of how this manifests is stigma shaping the attitudes of health and care providers, and consequently what treatment is available, how successful it may be, and how able people feel to continue engaging with the health and care system. We need ambitious government action that recognises that our health is shaped by our circumstances and environment. Rather than blaming individuals, we need interventions to improve our food system, create healthy communities and tackle poverty.

The belief that diet-related ill health results from personal failure and lack of willpower is unsubstantiated. On the contrary, The Food Foundation's Broken Plate report highlights how our food environments are restricting and manipulating our choices, and shows how social and commercial factors are much more important drivers of poor diets than lack of knowledge or willpower. Policies centred on individual action have failed time and time again because food environments make these actions too hard to adopt in practice.

Anna Taylor,
CEO of the Food Foundation

What I want from my care can be best described as a boxing analogy. I'm in the ring, and my opponent is my diabetes. In my corner should be my healthcare professional, encouraging, coaching, understanding, and supporting me through medication, therapies, and empathetic, holistic care.

In the other corner, is the societal, institutional, and healthcare professional-centric shame, blame, and judgement that surrounds us. But instead of being in my corner, all three of them – my diabetes, stigma, and my healthcare professionals – are in the ring across from me now, battling my diminishing will to stay well.

I go into every interaction - in healthcare and often in life - on the back foot of someone else's judgement. Judgement about what I eat, how I exercise, how I live, and who I am. I deserve empathy, understanding, and fair treatment. I deserve to be treated as a person, not an HbA1c. I deserve better.

Jessica, diagnosed with type 2 diabetes aged 37

IDENTIFYING AND SUPPORTING THOSE AT HIGHEST RISK

Alongside population level changes, we also need new ways to identify those at highest risk of developing type 2 diabetes under 40 and provide personalised, accessible support to reduce their risk.

Recently published data from the ONS based on 2013-19 figures estimated that around 1 in 9 adults are living with non-diabetic hyperglycaemia (NDH), which puts them at high risk of developing type 2 diabetes. This is approximately 5.1 million people in England, far higher than the 3.2 million people who have been diagnosed with NDH, according to 2022/23 data.[XXII., XXII.]

ONS data also estimates that 1 million adults in England are living with undiagnosed type 2 diabetes, and that those under 40 are more likely to be undiagnosed than older adults, leaving them without access to treatment or support, and so at increased risk of starting to develop serious complications before even getting a diagnosis. Programmes to identify people at high risk of type 2 diabetes and other conditions, such as the NHS health check and the new NHS digital health check, are falling short as they are specifically targeted to those over the age of 40. In part this is because of challenges of reduced public health funding and disruptions to primary care during the pandemic, but also because they have not been set up for this younger cohort.

As type 2 diabetes is becoming more common in younger people, we need targeted ways of identifying people at the highest risk sooner. These should recognise that the risk of developing type 2 diabetes increases at a younger age for people from Black and Asian backgrounds. As a first step, a pilot programme should be introduced in areas with a high prevalence of type 2 diabetes and cardiovascular disease to explore the benefits of offering the NHS health check from age 25 to people at risk of developing type 2 early, including people from Black and Asian backgrounds.

However, with take up of NHS health checks historically low, further research is needed to establish the best approaches to identify people under 40 at high risk of, or with, type 2 diabetes. For example, a recent study at Tameside General Hospital to understand the potential benefits of screening all blood tests taken in A&E, found a high pick-up rate of people with type 2 diabetes and non-diabetic hyperglycaemia, although those identified tended to be older.[XXIV.]

Once recognised as being at increased risk, the NHS Diabetes Prevention Programme supports people with behavioural change to lose weight and reduce their blood glucose levels. It has been shown to be effective in delaying the onset of type 2 diabetes and recent analysis showed reduced incidence of type 2 diabetes as a consequence of the programme. [XXV.] Recently the programme has been opened up to people that have had gestational diabetes, who are at increased risk of developing type 2 diabetes. It will be important to assess uptake, experience and outcomes from the programme amongst this group of participants, and these results should be published to inform the future of the programme.

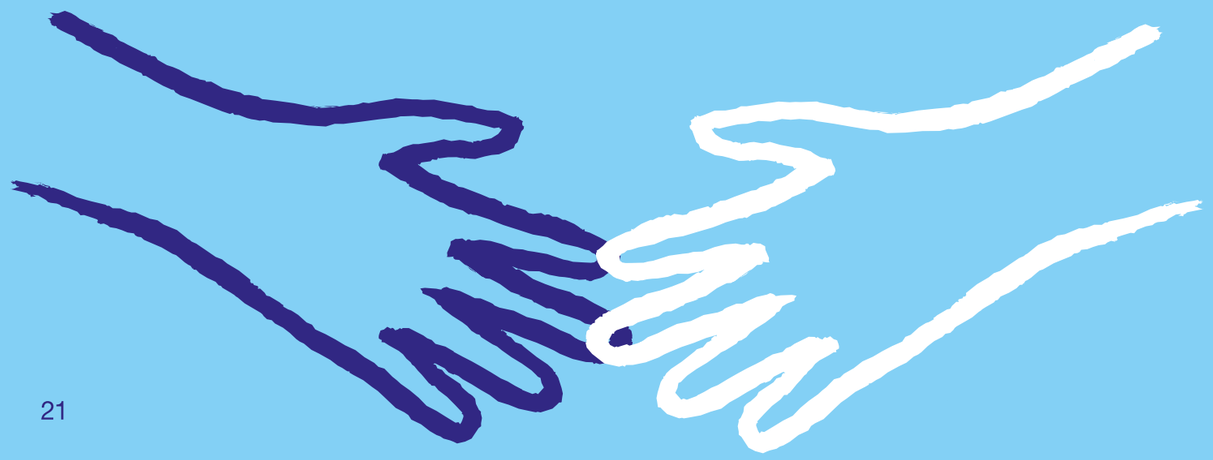
Given that such a high proportion of adults are now understood to be at high risk of developing type 2 diabetes, it is vital that sustained funding is secured to enable the continued expansion of the NHS Diabetes Prevention Programme. Investment and incentives should be in place to drive up more consistency in local systems referring people who could benefit into the programme. The future development of the programme also needs to improve provision across all population groups, including the growing number of younger adults at high risk.

GETTING DIAGNOSIS AND EARLY SUPPORT RIGHT

In younger people, there is an increased risk of misdiagnosis with a different type of diabetes and without a correct diagnosis, people cannot receive appropriate care and support to manage their condition. Misconceptions about diabetes mean clinicians do not always recognise the signs of type 1, type 2 and rarer types of diabetes accurately in young adults. Therefore, there is a need for greater understanding amongst healthcare professionals to ensure a correct and timely diagnosis.

The time immediately after a type 2 diabetes diagnosis is critical for educating people on their condition, providing support, tackling stigma and encouraging behaviour change. Given the poor outcomes for people who develop type 2 diabetes at a younger age, it is particularly important that they are offered information about the options for weight management and remission services and support to access them.

Diabetes UK wants to significantly increase the number of people who are receiving good support at the point of diagnosis, and therefore get onto a good trajectory of self-management, with appropriate healthcare engagement. Subject to investment, we propose to support both the NHS and people newly diagnosed with diabetes with a joined up, coherent, consistent, accessible and inclusive support offer for the first 12 months after diagnosis.



SUPPORTING PEOPLE TO STAY WELL

Once diagnosed, it is critical that people receive high-quality diabetes care, treatment and support to prevent complications. This is particularly important for those diagnosed with type 2 diabetes under 40, when the condition is more aggressive and the risk of complications higher.

In August 2023, NHS England announced £14.5 million of funding over two years for 'T2Day: Type 2 Diabetes in the Young', a new initiative to offer targeted care to young adults with type 2 diabetes to help lower their risk of complications. Diabetes UK welcomes this step forward in responding to the specific needs of this group. It will kickstart a focus on improvement for this vulnerable group including on confirmation of diagnosis, additional checks, contraception and pre-conception planning, and assessment of cardiovascular risk.

The T2Day programme, already being rolled out in the majority of Integrated Care Systems (ICSs), promises increased support for tens of thousands, with learning to be shared across the health system. However, investment of this nature, as well as being only short term, is also susceptible to being reallocated by local systems to address financial deficits or fund other services. Investment in targeted support for those most at risk of diabetes complications should be sustained, protected and prioritised to prevent future harm, which is life-changing to individuals and costly to the NHS.

We know from numerous studies that effective diabetes management in the early years is key to reducing the risk of complications in the future. There is still a lot of stigma around having type 2 diabetes and I think this can be felt particularly strongly in younger adults and is a huge barrier to seeking help and support.

What is great about the T2Day initiative is that it's raising awareness and incentivising GP surgeries to proactively identify individuals diagnosed with type 2 diabetes under the age of 40, review their care and invite them to an extended review.

This extended review must not become a tick box exercise but instead it should offer additional protected time for the person to discuss aspects of living with diabetes that matter to them.

The absolute numbers, at a practice level, will be fairly small and shouldn't feel too overwhelming in terms of workload and capacity although this might be a perfect opportunity to involve the broader workforce and also to fully optimise referral to programmes such as the Pathway to Type 2 Diabetes Remission, NHS Heathy Living and so on.

One size never fits all and this is especially true for this younger group of people living with type 2 diabetes. We do need to consider potential barriers to engagement such as the timings and locations of appointment and the type of education offered.

Jane Diggle
Specialist Diabetes Nurse Practitioner
Committee Member of Primary Care Diabetes Society
Editor-in-Chief Diabetes & Primary Care Journal

CARE FOR CHILDREN WITH TYPE 2 DIABETES

Once considered impossible, type 2 diabetes in children has been rising in the UK since the first case was recorded less than 25 years ago. There are now 2,000 children aged 18 and under in England and Wales with a diagnosis of type 2 diabetes, this includes 150 children under 12.[xxvi.]

The inequalities that we see in type 2 diabetes in adults are exaggerated in children with type 2 diabetes, with prevalence much higher amongst children from the most deprived areas compared to the most affluent parts of the country. Reducing childhood poverty and ensuring every child has access to a healthy diet is a vital step to stopping the next generation from developing type 2 diabetes at such a young age. Diabetes UK supports calls for cross-government action to address the social determinants of health, including measures such as the introduction of universal free school meals, and a guarantee that universal credit will meet the costs of essentials.

It is also vital that children who develop type 2 diabetes have access to specialist services to support them to manage their condition and support their long-term health. However inequities in access to, and outcomes from, care are also very pronounced in this group. Only a third of children with type 2 diabetes over 12 received their eight care processes in 2021/22, compared to 60% of children with type 1 diabetes. Children with type 2 diabetes also have low rates of treatment for recognised complications.[xxvii.]

Due to the relatively low numbers of children with type 2 diabetes in specialist services, often in centres with fewer than 10 with the condition, a networked approach to setting up multi-disciplinary teams is recommended. This enables teams to provide care locally and also receive support from peers to develop pathways and discuss cases. By taking this approach, healthcare teams can grow the skills and confidence required to improve care and outcomes. For the estimated 20% of children with type 2 diabetes under 18 seen in primary care, there should be active case-finding to identify them and consider referral to specialist units where suitable for the child and their family.

DIABETES TECHNOLOGY

Diabetes technology changes lives. It supports people to manage their condition and can reduce both short and long-term diabetes harm. In 2022, for the first time in England and Wales, NICE recommended Flash and continuous glucose monitors (CGM) for some people with type 2 diabetes, including some of those on multiple daily insulin injections. Early trials suggest more people with type 2 diabetes could benefit from using CGM to better understand and manage their condition. However, more research is needed to understand which groups could most benefit from using technology and at what stage of their diabetes journey, for instance younger people with type 2 diabetes or at the point of diagnosis.

We are concerned that pre-conceptions about who can benefit from technology, stigma, and concerns over funding are delaying the roll out of CGM to people with type 2 diabetes. Since new guidance was announced in March 2022, Integrated Care Boards (ICBs) have moved more quickly to adopt the type 1 guidance than that for type 2. Of the 42 ICBs in England, 31 now have published policies which fully or partially align with NICE's guidelines for type 1 but so far only just over half (23) have done so for type 2.

Wearable diabetes technology also has the potential to improve serious adverse maternal and neonatal outcomes in type 2 pregnancies. The National Institute for Health and Care Research (NIHR) has approved a large study to better understand the impact of using CGM in pregnancy for people with type 2 diabetes. Currently, for pregnancies for women with type 2 diabetes, just 12% had a recorded offer of CGM.

PREGNANCY AND PRE-CONCEPTION CARE

To reduce the risk to mother and baby, discussed earlier, it is critical that diabetes is well managed before pregnancy. Yet, in 2021 and 2022, less than 1 in 10 (9.5%) women with type 2 diabetes were defined as medically well prepared for pregnancy.[xxviii] Where possible, people should be offered additional information and support to improve their diabetes management before getting pregnant, to reduce the likelihood of complications, and contraception advice should be discussed as a part of routine diabetes care with those not planning on becoming pregnant.

To improve maternal and pregnancy outcomes, women with type 2 diabetes who could become pregnant should be informed that they should notify their healthcare team immediately if they have a positive pregnancy test. They should then be urgently referred to the Diabetes in Pregnancy team and reviewed within a week. Specialist support during pregnancy can help to reduce pregnancy risk, so it is essential that women know what is available and how to access it.

3 CONCLUSION AND RECOMMENDATIONS

The impact of type 2 diabetes in the UK is escalating rapidly, and we need a national commitment to slow the rise in prevalence and improve the support available to everyone living with the condition.

Until recent decades, we thought of type 2 diabetes as a condition of middle or older age, but we now face a mounting challenge as the numbers of young adults, and even children, developing type 2 diabetes is growing. The circumstances in which we are born, grow up and go on to live have a drastic impact on our risk of type 2 diabetes. It will therefore take sustained government action to build communities that support our health and create a food environment in which everyone can afford and access a healthy diet, but the rewards will be enormous. This represents a generational opportunity to improve millions of lives, boost productivity and reduce early mortality.

In the meantime, for the millions already living with diabetes, we have a responsibility to support them to live well and prevent complications. High-quality diabetes care not only saves lives, but enables people to stay in work and contribute to their communities in other ways, ultimately improving the country's prosperity. Support, education and regular health checks have been shown to reduce the risk of complications, but these must be accessible to everyone living with diabetes. Currently, those under 40 are more likely to miss out on the support they need, so we need innovation and reform to services to ensure they meet the needs of this growing cohort.

Recommendations for government:

1. Commit to healthier childhoods by enacting bold fiscal measures to enable healthier diets via reformulation and reduction of consumption of unhealthy products. New measures should consider inequalities in access to healthy food and seek to address them by making healthier options more affordable and accessible.
2. Implement existing commitments to reduce obesity, including delayed plans to protect children from junk food advertising on TV and online.
3. Bring forward an effective cross-government strategy to reduce health inequalities, including wide-ranging measures to reduce poverty and recognising diabetes as a major driver of health inequity.
4. Implement an enhanced support offer – working hand in hand with Diabetes UK – for people newly diagnosed with type 2 diabetes to support self-management in the first year after diagnosis.
5. Invest in the piloting of the NHS health check from age 25 in areas of high type 2 diabetes prevalence, focusing on groups most vulnerable to developing type 2 diabetes at a younger age, including people from Black and Asian backgrounds.
6. Provide sustainable longer-term investment and prioritised programmes of targeted support for those most at risk of diabetes complications, such as that provided through the T2Day programme.

Recommendations for priority areas for research funders:

1. Developing and testing the optimal service model to support children and young adults with type 2 diabetes and their families.

2. Testing which groups within the type 2 population could most benefit from using diabetes technology and at what stage of their pathway.

3. Establishing the best approaches to identify those living with or at high risk of developing type 2 diabetes under 40.

4. Identifying and testing the best approaches to prevent type 2 diabetes in those at high risk of type 2 diabetes under 40.

Recommendations for healthcare systems:

1. Commissioners of care should work with primary and secondary care diabetes services to reduce age, ethnicity and deprivation related inequalities.

2. Ensure that all practices across local systems, particularly in areas of high prevalence of type 2 diabetes, enable equitable access to the NHS Diabetes Prevention Programme and appropriate referrals are considered across all eligible age and population groups including younger adults and women who have had gestational diabetes.

3. Use T2Day funding to improve care for people under 40 with type 2 diabetes, including offering extended reviews and pre-conception planning.

4. Ensure policies are in place and implemented enabling access to eligible groups of children and adults with type 2 to diabetes technology in line with NICE guidance.

5. Support the development of clinical networks to deliver consistent, high-level care for children and young people with type 2 diabetes, following latest evidence-based guidelines and sharing best practice.

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