

**DiABETES UK**  
KNOW DIABETES. FIGHT DIABETES.

# Tackling the crisis:

Transforming diabetes care for a better future  
England



**Diabetes is potentially the greatest health crisis facing our nation. The number of people with the condition has doubled in the last 20 years, mainly due to the rapid rise in the number of people with Type 2. Thousands of children and young people are now diagnosed with a condition that used to be thought of as being only for older people.**

People with diabetes are two and a half times more likely to have a heart attack and twice as likely to have a stroke as the general population. More than 500 people die early every week, many as a result of avoidable complications.

But, whilst we recognise the threat to the nation's health from diabetes, we also maintain that there is hope. When we spoke to nearly 9,000 people with diabetes for our Future of Diabetes report, they told us that having hope was very important. And one source of that hope is the commitment to diabetes care and prevention in NHS England's new Long Term Plan.

The Long Term Plan recommits the NHS in England to some tried and tested ways to improve diabetes care and prevent Type 2 diabetes, reflecting many of the priorities that people with diabetes told us were important in the Future of Diabetes report. This includes making sure that all hospitals have dedicated diabetes inpatient teams, to better support people with diabetes in hospital, and a separate footcare team to focus on stopping foot problems such as chronic wounds, which lead to amputations. The Plan will continue to fund additional education courses and improvements to local diabetes systems, so that more people can better understand how to manage their diabetes. The prevention programme for Type 2 diabetes will be doubled in size so it will reach 200,000 people a year and will include new digital prevention resources.

For people living with Type 1, there will be national funding and a single set of criteria for more people to get access to flash glucose monitoring. This has been described by people with diabetes as life changing. It's been shown to improve quality of life and outcomes, by enabling people to check their glucose levels more easily and frequently than finger-prick glucose monitoring and by providing better information on the glucose levels. Pregnant women with Type 1 will be offered continuous glucose monitoring devices to help them have safer pregnancies.

Research we've funded in Type 2 diabetes into routes to remission for some people will now be trialled in a large scale pilot, meaning that people in England will gain access to these exciting advances in understanding how to put their Type 2 diabetes into remission.

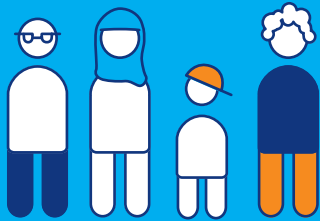
The profile of diabetes has never been higher and Diabetes UK welcomes the commitments in NHS England's Long Term Plan, which we know mirror many of the things which people living with or at risk of diabetes. Our role now, working with our campaigners, is to ensure that these commitments are turned into reality. That is why we are continuing to push for better diabetes care for everyone, including greater access to emotional and psychological support, as well as reducing the number of people developing Type 2. We know this NHS England Plan is ambitious, but through campaigning, support for commissioners and health care professional development, and by working alongside those with lived experience of all types of diabetes, we are ready to support the NHS in England to improve diabetes care and prevention.



Chris Askew  
CEO, Diabetes UK

# The diabetes crisis: serious, costly and growing

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**4.7 million**  
people in the UK have diabetes<sup>1</sup>.

**4 million**  
people in England have diabetes.

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There are more people than ever living with diabetes. In England, 4 million people, 1 in 15, have the condition<sup>2</sup>. Almost 900,000 of them are estimated to be living with the condition, but undiagnosed<sup>3</sup>.

Today, someone is diagnosed every two minutes<sup>4</sup>. And the number of people experiencing complications or dying because of their condition is growing too. More than 500 people with diabetes die prematurely every week<sup>5</sup>.

## People from deprived areas or an ethnic minority are more likely to have diabetes

You are more at risk of Type 2 diabetes if you are from a deprived area. A quarter of people living with Type 2 diabetes are from the most deprived fifth of society, compared to 15% from the least deprived<sup>6</sup>.

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You are more at risk of Type 2 diabetes if you have a **close family member** who has diabetes.<sup>8</sup>

South Asian and black people are **two to four times** more likely to develop Type 2 diabetes than white people.<sup>7</sup>

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## Rising rates of diabetes

The number of people living with diabetes in the UK has more than doubled in the last 20 years<sup>10</sup>.

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By 2035

**more than 5 million**

people will be diagnosed with diabetes in England.<sup>11</sup>

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This increase is largely due to more people developing Type 2. We don't know exactly what causes it but being overweight or obese can contribute up to 85% of your risk of developing Type 2 diabetes<sup>12</sup>.

By reducing the number of people who are overweight or obese, we can reduce the number of people developing Type 2 diabetes and living with the life-changing complications associated with it.

## Rising rates of obesity

66% of men and 57% of women in England are overweight or obese. Almost 10% of children aged 4 to 5 years old and 20% aged 10 to 11 are obese<sup>9</sup>.

## Seriousness of diabetes

### Every week diabetes leads to more than



**169** amputations



**680** strokes



**530** heart attacks and almost  
**2,000** cases of heart failure.



More than **500** people with diabetes die prematurely every week.

13\*

If you have diabetes, you're more at risk of a heart attack, heart failure or stroke. This is because high blood sugar levels damage the heart and blood vessels over a long period of time.

Compared to people without diabetes, people with **Type 2 diabetes** are



**nearly 2.5 times**  
more likely to have  
a heart attack



**more than 2.5 times**  
more likely to experience  
heart failure



**2 times**  
more likely to  
have a stroke.

14\*

\*Figures for strokes, heart attacks and heart failure are for England and Wales.

## Costs and health implications of diabetes

A significant amount of money is spent on diabetes care, the majority of which is spent on complications.

As we know people with diabetes are more at risk of a heart attack, heart failure and stroke. Taking these complications into account, it's estimated that diabetes costs the NHS over £10 billion a year.

With more people living with diabetes, the number of people with complications is likely to increase too. So, without sustained improvements in care and preventative measures, costs will continue to rise. By 2035, we predict that 185,000 people living with diabetes will have heart failures or heart attacks, and 50,000 will have a stroke<sup>15</sup>.



The NHS spends at least  
**£10 billion a year**  
on diabetes.

**That's 10% of its entire budget.**

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# Tackling the crisis: fewer people with Type 2 diabetes

Make the healthy choice the easy choice

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## More than half

of all cases of Type 2 diabetes could be prevented or delayed.<sup>17</sup>

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In June 2018, the government released **Childhood Obesity: A Plan for Action, Chapter 2**<sup>18</sup>. It made ambitious promises to ‘halve childhood obesity and significantly reduce the gap in obesity between children from the most and least deprived areas by 2030’<sup>19</sup>.



### We call for:

- Government commitment to support and deliver the ambitious proposals in Chapter 2 of its childhood obesity plan. This must include introducing mandatory out-of-home calorie labelling, banning the promotion of unhealthy food, and introducing a 9pm watershed for advertising unhealthy products.
- Government should commit to taking decisive action if the food industry does not meet commitments as part of the Public Health England sugar, salt and calorie reduction programmes.

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## Over 10 million

people are at increased risk of Type 2 diabetes in England.<sup>23</sup>





## Find and help people at high risk

The **NHS Diabetes Prevention Programme** (NHS DPP) was established in April 2018, by Diabetes UK working together with NHS England and Public Health England. The programme helps people to lose weight and get more active over nine months, to reduce their risk of Type 2 diabetes. Over 280,000 people have been referred to the NHS DPP so far<sup>20</sup>. On average, those who were obese or overweight and have completed the programme have lost over 3.7kg<sup>21</sup>.

Launched in England in 2009, the NHS health check programme offers a 5-yearly check-up to everyone aged 40 to 74 with the aim of spotting the early signs of diabetes, stroke, kidney disease, heart disease and dementia.

But less than half of over 40s eligible for an NHS Health Check in the last five years, have actually received one. On a local authority level there is a five-fold variation between the best and worst performing local authorities<sup>22</sup>.



### We call for:

- NHS England and Public Health England to maintain their commitment to the NHS Diabetes Prevention Programme and NHS Health Checks, taking action to increase and widen uptake of both.

## Increasing availability of services that can put Type 2 diabetes into remission

It's possible to put Type 2 diabetes into remission through weight loss. Intensive lifestyle changes including low-calorie diets, like our DiRECT study<sup>24</sup>, have promising results, with almost half of the participants achieving remission one year later<sup>25</sup>. Bariatric (or weight loss) surgery is another possibility. The National Institute for Health and Care Excellence (NICE) has guidelines on when it's appropriate to refer people with recent-onset Type 2 diabetes for bariatric surgery<sup>26</sup>. We know that weight loss can be achieved through various means including low carb and Mediterranean diets, and the benefits of weight reduction to people with Type 2 diabetes can be significant. Even if they don't go into remission, it can help them reduce or stop taking blood glucose lowering medications, and reduce the risk of complications through improved HbA1c management.

We need more research to understand the long-term impact of remission on reducing complications, and the subsequent impact on NHS spending.



### We call for:

- The NHS to pilot a programme of low (800 calorie a day) diets, as committed to in the **NHS Long Term Plan**, so that people with Type 2 diabetes can benefit from this approach to weight loss and potential remission as soon as possible.
- Increased use and access to bariatric (or weight loss) surgery for people with Type 2 diabetes that could benefit from it and a recognition of metabolic surgery in local care pathways for people with Type 2.

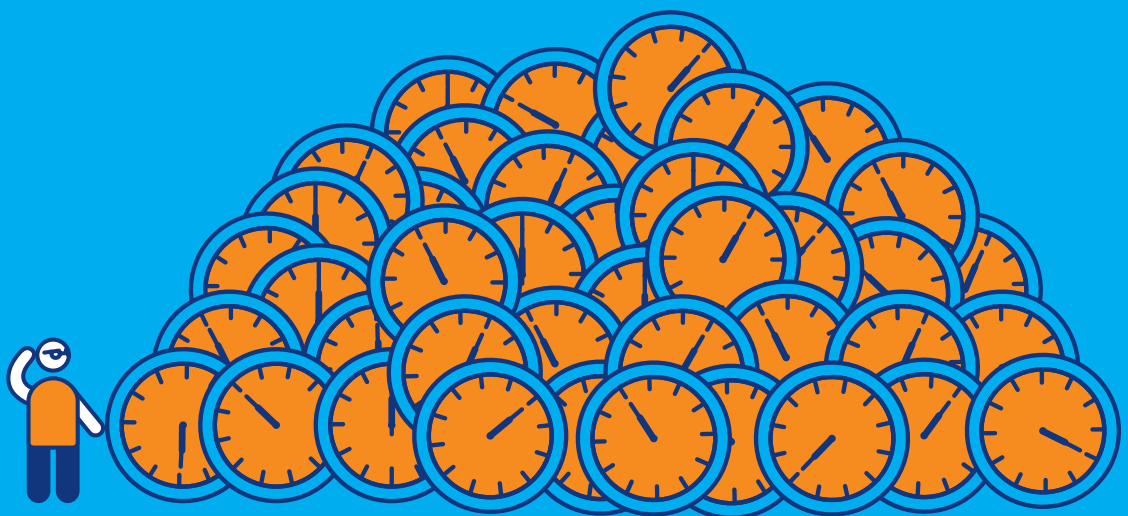
# Tackling the crisis: transform support for people's mental and physical health

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People with diabetes spend around **three hours** with a healthcare professional every year.



For the remaining **8,757 hours** they must manage their diabetes **themselves**.<sup>27</sup>



## Education and self management support for people living with diabetes

Diabetes is a complex and challenging condition. So it's vital that people gain the skills and confidence to cope with the daily demands of self-management to avoid serious complications.

Through our future of diabetes<sup>28</sup> engagement work, people with diabetes told us that structured education was life-changing. But only 39% had attended a diabetes education course, despite 70% being interested in doing so<sup>29</sup>.

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### People who go on diabetes education courses



have lower blood glucose levels,



improved health

and fewer complications.

<sup>30</sup>

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Overall, 75% of people diagnosed with Type 2 diabetes and rarer types of diabetes, such as MODY, were offered a structured education course within the first year of diagnosis<sup>31</sup> and only 39% of those with Type 1. It's less clear how many people attended these courses and attendance rates vary across England.

The **National Diabetes Audit**<sup>32</sup> shows between 0% and 50% of patients with Type 1 and between 0.5% and 27.7% of patients with Type 2 have been able to attend a course within 12 months of diagnosis depending on the CCG. The situation may be better than this but we need CCGs, the NHS and education providers to work together to identify the current level of access.

The **National Paediatric Audit**<sup>33</sup> shows that just over two thirds (72%) of children and young people with Type 1 diabetes were recorded as receiving structured patient education in 2016/17.

You can find out what the situation is in your local area, by looking up your local clinical commissioning group (CCG) at <https://fingertips.phe.org.uk/profile/diabetes> or by emailing [stats@diabetes.org.uk](mailto:stats@diabetes.org.uk).

With digital technology, we have new opportunities to help people learn about diabetes, manage their condition or reduce their risk of Type 2. We strongly support the way the NHS England Programme is rapidly evaluating these new approaches. People should benefit from successful interventions as soon as possible.



#### We call for:

- NHS England to keep investing and supporting in the rapid expansion of diabetes education, through face-to-face and digital services.
- Local health economies to commission and promote the full range of face to face and more flexible digital diabetes education approaches.

## Emotional and psychological support

Diabetes doesn't just affect you physically. Changes in mood due to varying blood sugar levels and the relentless need to manage the condition affects people's mental health too. Through the Future of Diabetes people told us they'd like more emotional and psychological support. A third of our survey respondents said they'd be interested in receiving support or counselling from a trained professional. And a quarter said they'd like to attend a local support group<sup>34</sup>.

At least 4 in 10 people with diabetes experience emotional or psychological problems, like depression, anxiety and emotional distress<sup>35</sup> as a result of their diabetes. Yet less than a quarter of people with diabetes get the emotional and psychological treatment they need from the NHS<sup>36</sup>. An inquiry held by the All-Party Parliamentary Group for Diabetes<sup>37</sup> heard from people living with Type 1 and Type 2 diabetes and their carers, as well as healthcare professionals and researchers. It found that the current provision for psychological care for people with diabetes is inadequate and extremely variable. And there's been little improvement in the past 10 years.

Almost three quarters of children with Type 1 had a psychological assessment and of those, a third were referred and seen by Child and Adolescent Mental Health Service<sup>38</sup>.

Physical and mental health are linked. The NHS spends an extra 50% treating the physical health of someone who has Type 2 diabetes and poor mental health compared to someone with Type 2 diabetes and no mental health problems<sup>39</sup>.



People with diabetes are **twice as likely** to suffer from depression. And are more likely to be depressed for longer and more frequently.<sup>40</sup>

**Around 40%** of people with diabetes struggle with their psychological wellbeing, often because of the demands of diabetes.<sup>41</sup>



### We call for:

- The emotional and psychological impact of diabetes to be recognised in all diabetes care, as part of a person-centred approach.
- All people affected by diabetes to have access to specialist emotional and psychological support if they need it.
- National and local training providers to make sure that the right staff with the right skills are available to meet the emotional and psychological needs of people living with diabetes. This must include training in mental health skills for those providing diabetes care, and improving the knowledge of diabetes among mental health professionals.



# Tackling the crisis: reduce variation in quality and access

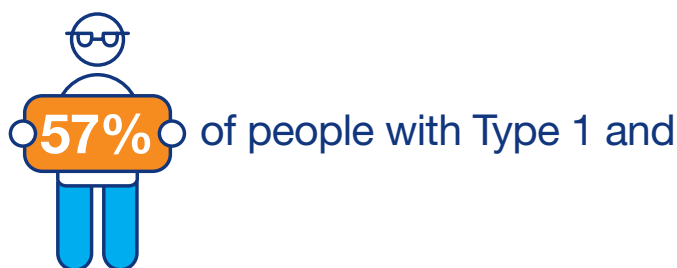
## Care processes and treatment targets

NICE and Diabetes UK<sup>42</sup> recommend nine care processes for people living with diabetes. These are checks for: HbA1c (blood sugar levels), blood pressure, cholesterol, serum creatinine, urine albumin, feet, body mass index (BMI), smoking, and eyes (retinal screening).

The **National Diabetes Audit** measures the first eight of these vital checks. It revealed a big gap between the worst and best performing Clinical Commissioning Groups (CCGs) in carrying them out, with 17.2 to 72.1% for people with Type 1 and 21.4 to 83.3% for people with Type 2<sup>43</sup>.

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People with diabetes should get **eight** basic health checks **every year** but



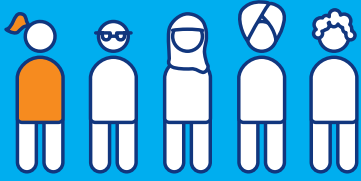
**don't get them all.**<sup>44</sup>

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**The National Paediatric Audit**<sup>45</sup> measures 7 care processes that all children and young people (ages 12+) should receive. They include HbA1c, body mass index (BMI), blood pressure, urine albumin, thyroid, feet, and eyes (retinal screening). In England, 42.5% of children and young people with Type 1 diabetes received these checks up from 35.5% in 2015-16.

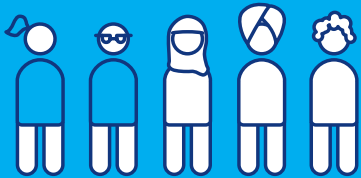
**The Complications and Mortality Audit**<sup>46</sup> showed that, over a seven year period, people with Type 1 and Type 2 diabetes who had received all their annual healthcare checks had better outcomes, including:

- lower mortality
- reduced progression to heart failure
- reduced progression to renal replacement therapy.



## Fewer than one in five

people with **Type 1** diabetes are meeting the recommended treatment targets that will reduce their risk of complications.<sup>47</sup>



## Two in five

people with **Type 2** diabetes are meeting the recommended treatment targets that will reduce their risk of complications.<sup>48</sup>

Over the last six years there have been improvements in the individual and combined three treatment targets, which measures HbA1c, cholesterol and blood pressure for Type 1 and Type 2 diabetes. Yet glucose control targets are achieved in Type 1 less than half as often as in Type 2.<sup>49</sup> And younger people with diabetes are less likely to achieve all three treatment targets than older people<sup>50</sup>.

In addition, there is variation in achievement of all the treatment targets, depending on CCG. For Type 1, this varies between 9.5% to 29.3% and for Type 2 between 32.4% and 47.2%<sup>51</sup>. You can find out the number of people achieving care processes and treatment targets in your local area, and compare this with other areas, at <https://fingertips.phe.org.uk/profile/diabetes-ft> or by emailing [stats@diabetes.org.uk](mailto:stats@diabetes.org.uk).

We've seen big improvements through successful approaches that include:

- More people with diabetes accessing high quality care closer to home, through diabetes specialists supporting primary care.
- Quality improvement processes that use clinical audit data to identify what's working well and take action where there are issues so it can be done.



### We call for:

- Sustained commitment from NHS England, local services and healthcare professionals, to invest in the transformation of local diabetes systems, so they're more efficient, integrated and effective resulting in improved access to care processes and health outcomes for adults, children and families living with diabetes.
- Local health economies to invest in clinical leadership, information systems and support for improvement so everyone receives the best care.

## Footcare

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Diabetes leads to more than **8,500** leg, toe, or foot amputations every year.

**That's more than 160 a week.**

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If diabetes is poorly managed, it can lead to nerve damage, poor circulation and reduced feeling in the feet and legs. This can lead to serious foot problems. And the number of diabetes-related foot ulcers and amputations are increasing, costing the NHS and local health economies more money. In 2014 to 2015, healthcare related to foot ulceration and amputations for people living with diabetes was estimated to be £1 billion in England. Two thirds of this was spent on treating foot ulcers in primary, community and outpatient settings<sup>53</sup>.

The major amputation rate, defined as amputations above the ankle, in people with diabetes varies greatly between CCGs – 2.2 per 10,000 at one extreme compared to 21.3 at the other. The rate for minor amputation in people with diabetes varies from 6.8 per 10,000 to 43.8<sup>54</sup>. You can see your local rates of amputation at <https://fingertips.phe.org.uk/profile/diabetes> or by emailing [stats@diabetes.org.uk](mailto:stats@diabetes.org.uk).

We can reduce the risk of amputation if everyone over the age of 12 with diabetes has an annual foot check. And if those at increased risk are referred for specialist assessment by community foot protection services. Currently, it's one of the most often missed annual checks. In the last audit year, just 75.1% of people with Type 1 received a foot check and 86.8% with Type 2<sup>55</sup>. Yet, in the best performing areas for people with Type 1, 88.6% of patients received a foot check, and for the best performing areas for Type 2 patients, 93.9% of patients received a foot check.<sup>56</sup>

People should have rapid access to multidisciplinary specialist footcare teams known as MDFT, when they have an ulcer or other acute foot problems. Evidence shows the longer the delay before being seen by an MDFT, the more likely it will be that foot ulcers are severe and slow to heal<sup>57</sup>, increasing the risk of amputation. But 1 in 5 hospitals still don't have an MDFT<sup>58</sup>.

There has been improvement, thanks to the diabetes transformation fund. In one year, the fund has led to 185 staff being appointed to footcare teams across 80 hospitals<sup>59</sup>. But continued investment is needed to make sure that people at high risk of amputation get the support they need to avoid this outcome.



### We call for:

- NHS England to deliver on its commitment to invest further in developing diabetes footcare, so that all hospitals provide access to a multidisciplinary footcare team.
- Commissioners to ensure the whole footcare pathway is in place: from foot checks in primary care, to trained podiatrists in the community, and the right teams in hospitals.

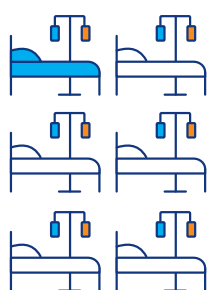


## Inpatient care

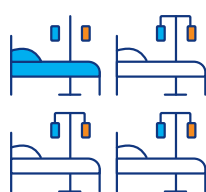
Through our Future of Diabetes survey, people reported not being allowed to self-manage their diabetes when in hospital. They also wanted to be more confident that they're being cared for by professionals competent in diabetes management<sup>60</sup>.

Today, 1 in 6 hospital beds are occupied by someone with diabetes. By 2030, this is predicted to rise to 1 in 4<sup>61</sup>.

In hospital, people with diabetes have high infection rates, and experience on average 1 to 3 days longer stays than patients without diabetes and increased mortality (6.4% higher)<sup>62</sup>. We know that diabetes inpatient teams reduce the length of stays and improve patients' experience, yet 28% of people who needed to see them during their hospital stay didn't<sup>63</sup>.



**One in six**  
people in a  
hospital bed  
has diabetes.<sup>64</sup>



In some hospitals over  
**a quarter**  
**of beds**  
are used by people  
with diabetes.<sup>65</sup>

Similarly, the **National Diabetes Inpatient Audit**<sup>66</sup> revealed a quarter of hospital sites still don't have a diabetes inpatient specialist nurse. NHS England's transformation fund has made progress, funding around 96 full-time equivalent specialist nurses and related staff in 70 hospitals across 46 providers<sup>67</sup>.

The audit<sup>68</sup> shows that some hospitals are making improvements in diabetes care, however, it also highlights huge variations in inpatient care. We recently made recommendations in **Making hospital safe for people with diabetes**<sup>69</sup>, promoting current good practice happening in some hospitals. For example, electronic prescribing and electronic patient records have the potential to reduce medication errors, but in 2017 only 17% of hospitals used both<sup>70</sup>. Variation exists across hospital sites in care and patient experience. Rates of medication error vary by over 60 percentage points across hospital sites, while patient satisfaction with the level of staff awareness and knowledge of diabetes varies by over 75 percentage points between the best and worst performing sites.<sup>71</sup>

You can see the current state of inpatient care in your local area on the **National Diabetes Inpatient Audit** website at <https://digital.nhs.uk>.



### We call for:

- Local health commissioners and hospitals to have multidisciplinary diabetes inpatient teams that lead on the condition in all hospitals. We need healthcare professionals who understand diabetes, including the value of supporting self-management in hospital. And we need the right systems and technology to support people safely.
- Hospital Trusts must make sure the staff caring for people with diabetes, including non-specialists, have a good understanding of the condition and are able to attend training to continue their professional development.
- NHS England to deliver on the commitment to invest in the development of specialist inpatient teams so that all hospitals have a specialist team.
- Local areas to scale up tried and tested ways of improving care that also save money.

# Tackling the crisis: adopt new technology and treatments rapidly

Although many people benefit from equipment and treatments to manage their diabetes, it can feel like a lottery. 28% of respondents to our Future of Diabetes survey said they have problems accessing technology or treatments<sup>72</sup>. People also told us that changes were being made, for example, to their meter or their number of test strips, without consultation or consideration of the impact this may have on their diabetes management.

A previous survey of over 1,000 people found that 27% had, in the previous 12 months, been refused a prescription for blood glucose test strips or have had the number of test strips on their prescription restricted.<sup>73</sup>

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**15%**  
of Type 1 patients in England  
have an insulin pump.<sup>74</sup>

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People with Type 1 on an insulin pump are more likely to achieve treatment targets than those not on a pump. But the proportion of patients attending specialist Type 1 diabetes services that use an insulin pump varies tenfold between areas<sup>75</sup>. We know that the number of people using pumps decreases with increasing deprivation.<sup>76</sup> The situation is improving but England continues to fall behind other countries for this life-changing technology<sup>77</sup>.

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Only  
**two thirds**  
of commissioning areas had made flash glucose  
monitoring accessible a year after it became  
available on NHS prescription.<sup>78</sup>

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We know that having more frequent glucose information, through continuous glucose monitoring (CGM) and flash glucose monitoring, helps people manage their blood glucose levels better<sup>79</sup>. Despite clear NICE guidance<sup>80</sup>, the use of CGM still varies across the country<sup>81</sup>.



## We call for:

- The NHS to reduce the variation in the provision of new and established diabetes treatments and technologies, like insulin pumps, continuous glucose monitoring, flash glucose monitoring, and test strips.
- NHS England to deliver on the commitment to roll out flash glucose monitoring across the country and to develop and roll out national criteria and a national diabetes technology fund to support wider and more equitable adoption of other new and existing technologies.
- Local prescribing policies and procurement to provide access to the best treatments and devices for those who can benefit. Healthcare professionals to be trained to support their use.
- NICE guidance and processes to provide faster access to treatments and technologies. So they can be quickly adopted by the NHS and made available to people with diabetes who will benefit.
- Regular care planning includes a review of whether people with diabetes are benefiting from the best technology and treatment for them



## Conclusion

Over recent years, welcome and significant advances have been made to improve diabetes care for all people living with diabetes, as well as advances in the prevention of Type 2. Investment through the transformation fund and the NHS Diabetes Prevention Programme, and support to extend the reach of diabetes education, are starting to show results.

But, we need sustained commitment from government and the NHS, nationally and locally, to ensure that this progress continues and is stepped up where needed, in order to address the diabetes crisis and radically reduce the harm now and in the future.

Find out more here: [www.diabetes.org.uk/professionals/position-statements-reports/statistics](http://www.diabetes.org.uk/professionals/position-statements-reports/statistics)



## Endnotes

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