

Access to Diabetes Technology in Brighton and Hove

A Report for the Health Overview and Scrutiny Committee

November 2024

Access to Diabetes Technology in Brighton and Hove.

Introduction.

- 1. Diabetes is a long-term condition that occurs when either the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. The most common types of diabetes are:
 - Type 1 diabetes. Type 1 diabetes is characterised by deficient insulin production and requires daily administration of insulin. It is an autoimmune condition though neither its cause nor the means to prevent it are fully understood. Type 1 diabetes is usually diagnosed in children and young adults, although it can appear at any age. Management of type 1 diabetes is delivered by specialist diabetes services.
 - Type 2 diabetes. Type 2 diabetes affects how your body uses sugar (glucose) for energy. It stops the body from using insulin properly, which can lead to high levels of blood sugar if not treated. Type 2 diabetes can be preventable. Factors that contribute to developing type 2 diabetes include genetics, being overweight, not getting enough exercise, and older age. This is the most common form of diabetes. People with type 2 diabetes are predominately cared for by primary care, with specialist services managing the most complex patients.
- 2. The NHS spends over £10 billion each year on diabetes, equating to 6% of its budget, with over half of this money (60%) spent on treating preventable complications¹. As such supporting people living with diabetes to manage their condition, specifically through improved glycaemic control has the potential to reduce the costs to the NHS in managing the condition, but more importantly supports a healthier population.
- 3. The evolution of diabetes technology is a key component in transforming diabetes care and empowering people living with diabetes to better manage their condition, ultimately leading to improved clinical outcomes. Efficacy alongside safety and cost effectiveness is driving adoption of diabetes technology², which, when used appropriately, improves the lives and health of people with diabetes, and reduces the NHS costs related to management of diabetes and its complications. The focus until recently has been on providing this technology for people with type 1 diabetes, but this has now shifted to include a small cohort of people with type 2.

¹ Estimation of the direct health and indirect societal costs of diabetes in the UK using a cost of illness model (wiley.com)

² Evolution of Diabetes Technology - ScienceDirect

- 4. In managing type 2 diabetes a whole pathway approach needs to be considered, focusing on early identification (pre-diabetes), prevention and improved diabetes management through embedding sustainable behavioural and lifestyle changes to prevent people requiring technology to manage their diabetes. This contrasts with type 1 where there is no ability to reverse or enable remission although lifestyle factors can impact the condition.
- 5. This paper will set the context of the current diabetes landscape, alongside providing an up-to-date position on access to diabetes technology in Brighton and Hove.

Background.

- Diabetes technology can help people live better lives, and guidance from the National Institute of Clinical Excellence (NICE) advocates the use of technology to support some people living with diabetes through both NICE guidance (NG) and Technology Appraisals (TA).
- 7. NICE guidance is developed with health care professionals and people who use services to help with decision making on prescribing and recommended treatment³. Apart from Technology Appraisals, the use of NICE guidelines is not mandatory. Technology Appraisals are based on a review of clinical evidence and cost effectiveness, with a statutory responsibility for the NHS to make funding available for a recommended drug or treatment with a TA, normally within three months (unless otherwise specified)⁴.
- 8. There is a range of diabetes technology available, with multiple guidelines available over the years, which are summarised below.
- 9. Continuous Glucose Monitoring (CGM) systems monitor glucose. These devices are worn continuously on the body and provide a glucose reading to a smart phone or reader. Certain CGM devices are prescribable, however there are some devices with increased functionality which are non- prescribable.
- 10. A Continuous Subcutaneous Insulin Infusion (CSII) pump provides a steady stream of insulin to the body, with the person needing to test blood sugar levels, adjusting administration rate of the pump, and delivering boluses as needed. All CSII pumps are non-prescribable technology, and as such within the scope of this work. Pumps are used by patients to manage their diabetes by working alongside CGM monitors. CSII is almost exclusively used for people with Type 1 diabetes.

³ NICE guidelines | NICE guidance | Our programmes | What we do | About | NICE

⁴ Technology appraisal guidance | NICE guidance | Our programmes | What we do | About | NICE

- 11. More recently, Hybrid Closed Loop Systems (HCL) have become available; these comprise of a CGM device, and an insulin pump linked to a computer algorithm that can adjust the amount of insulin needed based on glucose readings. This feedback loop responds quickly to changes in glucose levels and "semi-automates" many of the processes people living with diabetes currently use to control their blood glucose levels.
- 12. The NHS Long Term Plan (2019) signalled NHS England's intent to rapidly improve access to diabetes technology. Subsequent NICE guidance (May 2022) for adults with type 1 diabetes (NG17), broadened the offer to state that all people living with type 1 diabetes should be offered CGM, with the device with the lowest cost offered if multiple devices meet the patients' needs and preferences.
- 13. In 2008, NICE recommended CSII pumps to support management of type 1 diabetes in TA151. This recommendation was built on in the 2022 guidance for adults with type 1 diabetes recommending CSII pumps for the cohort of patients living with type 1 diabetes who are the most clinically vulnerable and therefore at the greatest risk of accessing unplanned care or developing diabetes related complications.
- 14. In December 2023, NICE published a Technology Appraisal (TA943), which outlined a phased rollout of HCL to people living with type 1 diabetes. The NHS England, HCL implementation strategy describes a three-year plan for Children and Young People (CYP), and a five-year plan for the adult population. It is estimated over 150,000 people will be eligible for HCL in England and Wales by 2030, with 100% of CYP and c70% of adults estimated to be using HCL. This is a significant shift from the current landscape.
- 15. NICE Guidance 28, Type 2 diabetes in adults (NG28), recognises management of blood glucose is a core component of diabetes care, and that if type 2 diabetes is not well controlled, patients are at an increased risk of long-term complications. When NG28 was updated in June 2022 it recommended CGM is offered to adults living with type 2 diabetes who fulfil a specific set of clinical criteria. Contrasting the position for people with type 1, this recommendation equates to a smaller percentage of the people living with type 2, equating to only around 3.55% of people with type 2 diabetes.
- 16. Through dietary changes and weight loss, type 2 diabetes can be improved, or in some cases reversed, enabling someone to reach and hold normal blood sugar levels, living 'diabetes free' without medication. This puts a person's type 2 diabetes into remission (rather than cured) making it possible to go years without needing to control blood glucose and the health concerns that come with living with type 2 diabetes.

Strategic Context

- 17. There are more than five million people living with diabetes in the UK with national prevalence increasing year-on-year from 5.4% in 2009/10, to 7.5% in 2022/23⁵, and it is predicted to increase to 9% by 2030⁶. Due to the differing aetiology between the types of diabetes this increase is driven by an increasing number of people diagnosed with type 2 diabetes, the causes of which are complex, with age, family history, ethnicity and socio-economic background all contributing to a person's risk. Obesity also increases this risk, which is also heightened at a younger age.
- 18. In Sussex, just over 105,000 of the adult population are living with Diabetes; 12,820 of which reside within Brighton and Hove (where the total population is 276,300). 92% (96,650) of all adults with diabetes in Sussex have type 2, as opposed to 8% (8,505) of adults living with type 1. This split differs in Brighton and Hove, likely attributed to a younger demographic, with 11,360 people (89%) with type 2 diabetes and 11% (1,460) of people living with a diagnosis of type 1.
- **19.** Diabetes does not affect everyone equally, with factors driving inequalities complex and interrelated.
- 20. The links between ethnicity and type 2 diabetes are well documented with a disproportionate number of people diagnosed with diabetes from ethnically diverse groups (excluding white minorities). People from ethnic minority backgrounds are more likely to be living in areas of deprivation than those of white ethnicity, creating multifactorial risk⁷. The proportion of the Brighton and Hove population who fall within the high level 'white' category in 2021 was 85.4%, down from 89.1% in 2011⁸. This is lower than both the Southeast and English national averages of 86.3% and 82%, respectively. In Brighton and Hove 74% of type 2 diabetes is recorded within the white population with 16% recorded in ethnic minority groups. The remaining 10% currently have no ethnicity recorded.
- 21.In Sussex over 96% of people living with type 1 diabetes are from white population groups, or have no recorded ethnicity, with less than 5% known as being from an ethnic minority population group. Brighton and Hove differ from the wider Sussex position with 90% of type 1 diabetes in white population groups, or having no recorded ethnicity, with 10% in ethnic minority groups.

⁵ Cardiovascular Disease | Fingertips | Department of Health and Social Care (phe.org.uk)

⁶ NHS England » NHS scheme reduces chances of Type 2 diabetes for at risk adults

Mhat Are Health Inequalities? | The King's Fund (kingsfund.org.uk)

⁸ How life has changed in Brighton and Hove: Census 2021 (ons.gov.uk)

- 22. Socio-economic factors also influence outcomes for people with type 2 diabetes, with deprivation associated with unhealthy behaviours including access to nutritious food due to economic hardship, and a sedentary lifestyle, which increases the risk of obesity, and type 2 diabetes. People from the most deprived areas in England are 2.5 times more likely to be living with type 2 diabetes than people from less deprived areas.
- 23. Nationally, prevalence of type 1 diabetes by deprivation is equally split across all Indices of Multiple Deprivation (IMD) quintiles. Figure one sets out type 1 diabetes registrations by IMD quintile, and it can be noted at a Sussex level there is a lower prevalence than the national distribution in the most deprived areas (10.2% in Sussex contrasted with 19.9% nationally), and a slightly higher prevalence in the least deprived areas (23.0% in Sussex versus 19.4% nationally), with the highest distribution falling within the middle quintile. When looking at Brighton and Hove distribution, 17.1% of type 1 are living within the most deprived quintile, and 12.3% in the least deprived quintile. This breakdown is reflective of the significant variation in levels of deprivation across the city, with Brighton and Hove ranked 131 most deprived authority in England (out of 317) placing them in the third quintile (41%), with 15 out of 165 (9%) of neighbourhoods in the 10% most deprived in England⁹.

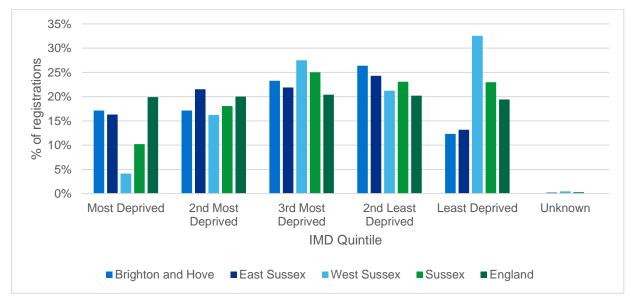


Figure one: Type 1 diabetes registrations by IMD Quintile and place. Source: NDA 2022/23

24. Nationally there is a higher prevalence of type 2 diabetes in the most deprived areas when compared to the least deprived. This is reflective of socioeconomic factors increasing the risk of type 2 diabetes. Figure two sets out type 2 diabetes registrations by IMD quintile, and it can be noted at a Sussex level there is a lower prevalence than the national distribution in the most deprived areas (11.2% in Sussex contrasted with

⁹ Index of Multiple Deprivation 2004 (brighton-hove.gov.uk)

23.6% nationally), and a slightly higher prevalence in the least deprived areas (19.4% in Sussex versus 15.0% nationally), with the highest distribution falling within the middle quintile. Looking at Brighton and Hove distribution, 8.9% of people live in the least deprived quintiles, below both national and Sussex averages. When looking at the number of people living with type 2 diabetes in the most deprived quintile, at 26% this is higher than the Sussex average, and of all the Sussex places individually, most likely reflective of the population distribution described in paragraph 23.

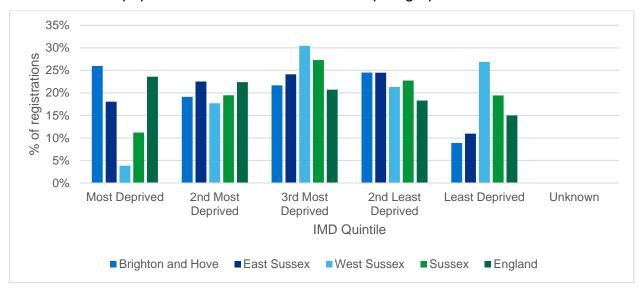


Figure two: Type 2 diabetes registrations by IMD Quintile and place. Source: NDA 2022/23

- 25. Type 2 diabetes is also two to three times more prevalent in people living with a severe mental illness (SMI). Various risk factors have been implicated, including side effects of antipsychotic medication and unhealthy lifestyles, which often occur in the context of socioeconomic disadvantage and health care inequality.
- 26. Prevalence of both type 1 and type 2 diabetes in people living with a learning disability (LD) is higher than in the general population¹⁰. According to data, 0.8% of people with LD in England have a diagnosis of type 1 diabetes, compared with 0.4% of the general population, with estimates for type 2 stating prevalence at 10%, almost double than in the general population¹¹. There are an estimated 970 people living with a LD and type 2 diabetes in Sussex equating to 9.2% of the local population.

¹⁰ rightcare-pathway-diabetes-reasonable-adjustments-learning-disability-2.pdf (england.nhs.uk)

¹¹ Diabetes deep dive Canva Version (kcl.ac.uk)

Accessing Diabetes Care in Brighton and Hove

- 27. Type 1 diabetes is predominantly managed by specialist services in line with national recommendations¹². For the population of Brighton and Hove this is provided by both University Hositals Sussex NHS Foundation Trust (UHSx) and the Diabetes care for You (DCFY) service sitting within Sussex Community NHS Foundation Trust (SCFT). Care within specialist services includes the provision of diabetes technology, foot protection teams, and multi-disciplinary foot team services, transition services (paediatric to adult), antenatal care, inpatient care, combined renal clinics, psychology, LD, HIV, and patient structured education programmes.
- 28. Management of type 2 diabetes is predominantly within primary care. In July 2024, the new 'improving diabetes care' locally commissioned service (LCS) went live across Sussex, resourcing practices to deliver enhanced care over and above the General Medical Servies (GMS) contract and the Quality and Outcomes Framework (QOF). For practices delivering the LCS there is an expected tier one service which includes the maintenance of registers, an enhanced service for newly diagnosed type 2 diabetes, enhanced care planning, pre-pregnancy counselling, optimising care prior to surgery, referral to the NHS National Diabetes Prevention Programmes (NHS DPP) and Type 2 Diabetes Path to remission Programme (T2DR) and ongoing management of insulin in general practice. There is in addition a discretionary tier two within the LCS, supporting risk reviews for patients at high risk of diabetes, and initiation of injectables (basal insulin and GLP-1 analogues). Due to the LCS only being active from 1st July 2024 data is not currently available, however we do know there is 100% practice sign up from Brighton and Hove to the tier one service, which is very positive.
- 29. The new LCS is clear that all people living with type 1 diabetes should be offered specialist care in line with national guidance, however the new LCS does allow for people who decline specialist services to be supported in primary care. There has been extensive work to harmonise the seven legacy LCS's and with a new Sussex wide offer now in place there is a real opportunity to continue to improve outcomes for people across the entire diabetes pathway.
- 30. GPs have access to specialist advice provided by UHSx and SCFT for people with type 1 diabetes. There are also pathways for managing type 2 diabetes in specialist services for the most complex and clinically vulnerable patients. Additionally, UHSx offers an electronic 'advice and guidance' service to primary care clinicians. This model supports the training and upskilling of the primary care workforce in diabetes management.
- 31. An important service offer within the end-to-end type 2 diabetes pathway are the prevention services. Localised offers within Brighton and Hove compliment the NHS offers which include the NHS Diabetes Prevention Programme (NHS DPP), the NHS

¹² Overview | Type 1 diabetes in adults: diagnosis and management | Guidance | NICE

- Type 2 Diabetes Path to Remission Programme (T2DR), and the NHS Digital Weight Management Programme (DWMP).
- 32. In Brighton and Hove the Diabetes Clinical Network have worked in collaboration with Voluntary, Community, and Social Enterprise (VCSE) partners and primary care to pilot three projects looking at innovative models of diabetes care.
 - The Hangleton and Knoll Project helps people manage diabetes through courses, workshops, and peer support groups. It focuses on self-care and prevention, especially in underserved communities. The project encourages healthy living, early intervention, and provides a supportive space for sharing advice, leading to better health outcomes and less pressure on local healthcare services.
 - 'Justlife', is a homelessness charity in Brighton that employs a diabetes health engagement worker to support clients who are insecurely housed and either at risk of developing or living with type 2 diabetes. The worker assists clients by taking them to medical appointments and offering advice on managing their condition.
 - Wellsbourne and Bridging Change. This is a collaboration between primary care and a VCSE organisation in Brighton. They are trialling the use of a point-of-care testing machine to combine two appointments into one. This initiative is complemented by focus group workshops with patients, aiming to improve appointment attendance and enhance self-care knowledge.

Each project took a different approach to supporting people who were at risk of or living with type 2 diabetes. Outcomes of the projects were predominately aligned with all seeing increased empowerment and understanding within the type 2 population on how to manage their condition, increased engagement with services to support diabetes management, and for those living at risk of diabetes an increased number of referrals to diabetes prevention services. All projects noted the 'power of peers' when sharing experiences relating to healthcare and prevention services.

Diabetes Technology in Brighton and Hove Sussex

Access to technology for people living with type 1 diabetes.

33. In Sussex there are pathways for all people living with type 1 diabetes to access prescribable technology with NHS Sussex spending over £6.5 million on this in 2023/24. These prescribable CGM devices are initiated by specialist diabetes nurses or doctors but prescribed within primary care. The prescribable CGM technologies 'Freestyle Libre 2' and 'Dexcom One' currently support just over 70% (National Diabetes Audit 2022/23) of the adult type 1 population in Sussex. These devices are not suitable for all patients. Some adults and children who are unable to stabilise their diabetes with these devices need access to more complex technology provided through specialist diabetes services and is non-prescribable. Legacy commissioning arrangements from CCGs have led to different commissioned pathways for non-prescribable technology creating variable access to these devices, with Brighton and Hove, and West Sussex having previously far better access than those living in East Sussex.

- 34. For the population of Brighton and Hove, non-prescribable technology pathways are in place to access devices at UHSx, with SCFT able to refer patients to UHSx to access this pathway. NHS Sussex will be implementing this year the use of a single system for monitoring these devices (Blueteq) to enable higher visibility of device usage.
- **35.** The new HCL technology will change the current landscape, with a shift away from all current technology towards devices that have the functionality to work as a HCL system, and it is predicted that all CYP and circa 70% of adults will be using HCL within the next five years.
- 36. Sussex has been working with providers to develop an implementation plan fully informed by information from NHS England, and aligned with the national plan for prioritisation groups, with local clinicians collaborating to further refine the prioritisation framework to ensure implementation of devices in the early phase (year one) is supporting those who are the most clinically vulnerable including those who are at greatest risk of hospital admission and deterioration of their disease.
- 37. We know through baselining that at the start of the five-year implementation (1st April 2024) there were at least 300 HCL devices being used by adults in Sussex to manage their diabetes and over 350 devices in the CYP population. As this is a new technology there is no baseline data to compare the Sussex position against, however, we do know anecdotally that there are other Integrated Care Boards (ICB's) who had no or very minimal HCL provision at the start of the five-year implementation, meaning that there was a higher baseline in Sussex than in other ICB's.
- **38.** Since 1st April 2024 pathways have been put in place for all acute specialist services in Sussex to access HCL for patients who are clinically vulnerable and assessed as being in a priority group.
- 39. On 19th July 2024 NHS England wrote to all ICBs detailing an indicative allocation for year one of the implementation directly linked to a 75% reimbursement scheme. This indicative cap establishes access in year one will be for maternity and the CYP population as well as switching the most clinically vulnerable who currently use CSII pumps. As further detail for years two to four become available modelling will be updated, reflecting priority groups in each year acknowledging both clinical needs, and addressing the inequalities in access. Sussex is fully aligned to the national delivery plan. Sussex has noted efficiencies can be realised through procuring non-prescribable devices through the national HCL procurement framework and is working with specialist providers to ensure this is in place.

Access to technology for people living with type 2 diabetes.

- 40. In type 2 diabetes, CGM is commissioned for people who are living with a learning disability (recorded on their GP Learning Disability Register) and have their diabetes managed through the administration of insulin. It is also available to people who are on haemodialysis and on insulin treatment requiring intensive monitoring >8 times daily.
- **41.** NICE guidance proposes that CGM is offered to a wider group of people living with type 2 diabetes. It is estimated that this would mean about 3.55% of the type 2 population,

- which would equate to 403 people within Brighton and Hove, or 3,431 people Sussex wide.
- **42.** It is known from prescribing data that many people in this cohort already are using this technology, but NHS Sussex is developing a policy to ensure an increased focus on providing equal access. The current priorities are the most clinically complex and vulnerable patients.
- 43. The most clinically complex patients with Type 2 diabetes are already under specialist services and will be supported to receive CGM as per the NICE criteria. Once training has been carried out, primary care services will also be able to provide this technology to ensure we reach all the 400 people who are eligible. The diabetes clinical reference group have led on developing proposals for increasing access to technology, alongside ensuring that our wider clinical model of care is fit for the future.

What are the Clinical Outcomes for People Living with Diabetes in Brighton and Hove?

44.To understand the impact of the current diabetes services and pathways in Sussex, we regularly review clinical outcomes with provider colleagues for the local population. The position for Brighton and Hove is set out below showing how it is performing in relation to the other Sussex places but also nationally.

Diabetes Care Processes and Treatment Targets

45. There are a range of measures used to inform and benchmark the quality of delivery and outcomes for diabetes services. In line with National Institute of Clinical Excellence (NICE) recommendations, the National Diabetes Audit (NDA) measures eight care processes (8CP) annually delivered by diabetes care providers, with a ninth the responsibility of NHS Diabetes Eye Screening (NHS England), alongside three treatment targets (TTT), outlined in table one, which should be conducted annually for all patients with diabetes.

	Nine Care Processes		Three Treatment Targets
•	Blood glucose level measurement (HbA1c) for glucose control.	•	HbA1c target (≤58 mmol/mol) reduces the risk of all
•	Blood pressure measurement for Cardiovascular risk.	•	diabetic complications. Blood Pressure target
•	Serum Cholesterol , a blood test for Cardiovascular risk.		(≤140/80) reduces the risk of cardiovascular complications and
•	Serum Creatinine, a blood test for Kidney function.	<u> </u>	reduces the progression of eye and
•	Urine Albumin / Creatinine Ratio , a urine test for risk of kidney disease.	•	Cholesterol target (<5mmol/L) reduces the risk of
•	Weight check.		cardiovascular complications.
•	Smoking status.		Or patients aged 40-80 prescribed a statin
•	Foot surveillance , an examination for foot ulcer risk.		Statiii
•	Digital Retinal Eye Screening for early detection of eye disease – delivered by screening services.		

Table One: Diabetes Care Processes and Three Treatment Targets.

46. Completion of the 8CPs in type 1 diabetes in Sussex is presented in table two and demonstrates a year-on-year improvement in Sussex since 2020/21 when completion was at 34.1%, following the impact of COVID. The latest validated NDA data showed 47.86% completion in 2022/23. The unvalidated 2023/24 data indicates an 48.43% completion, 0.5% lower than the 2019/20 pre-pandemic baseline. The trend for year-on-year improvement in Brighton and Hove has been variable. From 2019/20 to 2022/23, it was the top area, outperforming both Sussex and England averages. Preliminary 2023/24 data suggests it may align with the Sussex average while still exceeding the England average. However, the final results are expected to improve once validated. Brighton and Hove have not yet reached its pre-pandemic baseline. This is likely due to a higher completion of care processes prior to the pandemic. Further exploration of the detail demonstrates that for those who don't achieve completion of all care process, this is driven by only one process being missed, rather than a non-completion off all the required processes.

	2019/20	2020/21	2021/22	2022/23	2023/24
Brighton & Hove	60.73%	42.29%	51.56%	50.34%	*48.97%
East Sussex	48.90%	34.50%	38.55%	43.78%	*42.73%
West Sussex	44.94%	31.03%	39.98%	49.54%	*51.82%
Sussex	48.95%	34.10%	41.54%	47.86%	*48.43%
England	42.34%	27.39%	35.16%	42.76%	*44.27%

Table two: Completion of Care Processes in Type 1 diabetes 2019/20 – 2023/24. Source: NDA. * 2023/24 data unvalidated.

47. Table three displays 8CP completion for people with type 2 diabetes in Sussex, showing this rose to from 53.73% in 2021/22 to 62.81% in 2022/23, outperforming the national average of 57.89%. Brighton and Hove sit below the Sussex average completing 54.18% of all care processes in 2022/23, an increase of 7% on the previous year where 47.13% were completed. Looking back to 2019/20, Brighton and Hove have seen a year-on-year improvement from the pandemic baseline, with completion broadly in line with national averages except for 2022/23.

	2019/20	2020/21	2021/22	2022/23	2023/24
Brighton & Hove	59.87%	36.03%	47.13%	54.18%	*56.28%
East Sussex	64.61%	38.74%	52.87%	61.43%	*64.33%
West Sussex	66.60%	43.17%	55.65%	65.51%	*66.46%
Sussex	65.16%	40.88%	53.73%	62.81%	*64.53%
England	58.46%	36.88%	47.91%	57.89%	*62.28%

Table three: Completion of Care Processes in Type 2 diabetes 2019/20 – 2023/24. Source: NDA. * 2023/24 data unvalidated.

48. Attainment of the TTT in type 1 diabetes is presented in table four and demonstrates performance in Sussex better than the national average across all years, with a year-on-year improvement seen in England and Sussex since 2019/20, with no impact of the pandemic seen in TTT attainment in 2020/21. In Brighton and Hove, 2019/20 attainment at 22.62% was higher than both the Sussex and national averages, with a year-on year improvement seen through to 2023/24 where the current unvalidated performance is comparable to the previous year.

	2019/20	2020/21	2021/22	2022/23	2023/24
Brighton & Hove	22.62%	25.43%	23.04%	25.46%	*25.69%
East Sussex	21.48%	23.03%	25.49%	25.44%	*25.72%
West Sussex	19.45%	22.24%	23.99%	26.26%	*26.99%
Sussex	20.68%	23.06%	24.29%	25.87%	*26.37%
England	19.98%	21.50%	22.44%	23.92%	*24.71%

Table four: Attainment of the Three Treatment Targets in Type 1 diabetes 2019/20 – 2023/24. Source: NDA. * 2023/24 data unvalidated.

49. For the attainment of the TTT in type 2 diabetes, set out in table five, Sussex has seen some improvement to 37.35% in 2022/23 compared to 33.68% in 2021/22, though falling slightly behind the national average of 37.90%. Focusing on Brighton and Hove, this achievement sits below the national and Sussex average across all years achieving a 34.75% completion in 2022/23, a 3.5% increase from 31.29% in the preceding year. A decline has been seen both nationally and within Sussex, across all three places in the unvalidated 2023/24 data. Following validation, further interrogation of this data is required to understand the reasons for this decline.

	2019/20	2020/21	2021/22	2022/23	2023/24
Brighton & Hove	36.84%	31.82%	31.29%	34.75%	*31.54%
East Sussex	37.66%	32.59%	31.63%	35.78%	*34.39%
West Sussex	38.57%	33.69%	35.42%	38.86%	*37.38%
Sussex	38.07%	33.12%	33.68%	37.35%	*35.69%
England	40.09%	35.75%	35.73%	37.90%	*36.37%

Table five: Attainment of the Three Treatment Targets in Type 2 diabetes 2019/20 – 2023/24. Source: NDA. * 2023/24 data unvalidated.

50. Overall, in type 1 diabetes, Brighton and Hove performs better than both Sussex and England in completion of care processes with attainment of treatment targets varying but predominately aligned with the Sussex average. In type 2 diabetes performance in relation to both care processes and treatment targets is lower than Sussex and England averages, but year-on-year improvement is recorded through validated data since 2020/21.

Impact of Diabetes Related Complications in Brighton and Hove

51.Poorly managed diabetes can lead to serious foot problems and amputations, many of which are preventable with the right care. Sussex has seen an increase in all amputations from 1.30 (per 100,000 population) in 2021/22 to 1.56 in 2023/24. An increase is also

seen when breaking down to minor (0.90 in 2021/22 up to 1.04 in 2023/24) and major (0.40 in 2021/22 up to 0.51 in 2023/24) amputations. Concentrating on Brighton and Hove, minor amputation rates, as presented in figure three, saw a decrease from 0.78 in 2021/22 to 0.63 in 2022/23. An increase up to 1.08 has been seen in the 2023/24 year, with rates in Brighton and Hove in line with the Sussex average. Prior to 2023/24 amputation rates in Brighton and Hove were lower than the Sussex average. Across the same years, major amputations as shown in figure four, have remained consistently below the Sussex average, with a notable dip in the 2022/23 year.

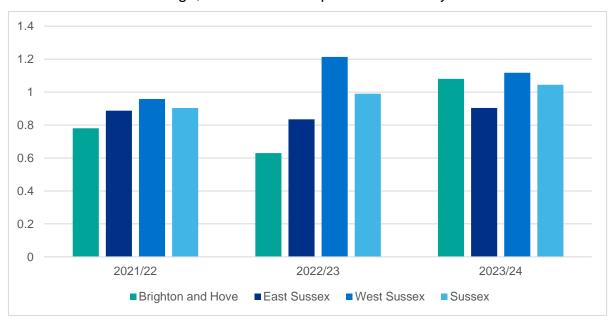


Figure three: Minor amputations in people living with diabetes by place per 100,000 population. 2021/22 – 2023/24. Source: SUS data

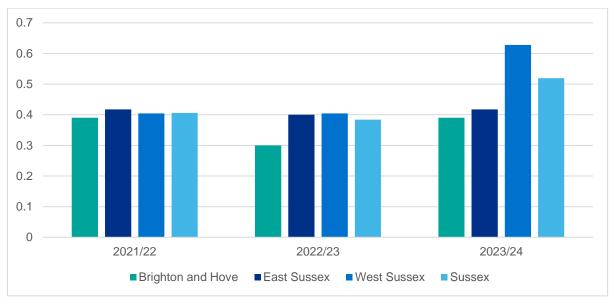


Figure four: Major amputations in people living with diabetes by place per 100,000 population. 2021/22 – 2023/24. Source: SUS data.

52. The Model Healthcare System can inform benchmarking for amputations. For non-

- elective major amputations in diabetes, Sussex ICB is in the third (second worst performing) quartile with a denominator of 119 benchmarked against a system median of 104.
- **53.** Diabetic ketoacidosis (DKA) is a life-threatening complication of diabetes and is more often seen in people living with type 1 diabetes, though can occur in people with type 2 diabetes.
- **54.**When looking at admissions per 100,000 population by place Brighton and Hove saw a drop in admissions in 2021/22 to 23.8 per 100,000 in comparison to 29.1 the previous year (2020/21), however in 2022/23 admissions have increased back to 29.4. Across all years Brighton and Hove have a consistently lower number of admissions per 100,000 than the other Sussex places.

	2020/21	2021/22	2022/23
Brighton & Hove	29.1	23.8	29.4
East Sussex	38.3	38.9	38.4
West Sussex	38.5	31.3	32.6

Table Six: DKA admissions by place per 100,000 population. 2020/21 – 2022/23. Source: SUS data

- 55. DKA admissions can be benchmarked through the Model Healthcare System data platform. This is only available at a provider level, rather than place and therefore the picture is distorted through UHSx providing in-patient services for people living outside Brighton and Hove. Quarter 4 data from 2023/24 shows a national provider median of 206, with UHSx in the fourth (worst performing) quartile, and a value of 348. As a system, Sussex sits within quartile 2, the second-best performing quartile, with a value of 540, in line with a national system median of 541.
- 56. Primary coded diabetes admissions (Non DKA) data per 100,000 of the population presented in table seven shows admissions for all types of diabetes by place. This cannot be broken down by diabetes type. Across all years Brighton and Hove have a lower number of admissions than the other Sussex places, sitting at 45.2 per 100,000 in 2020/21, dropping to 36.5 per 100,000 in 2021/22, then increasing back up to 43.8 in 2022/23.

	2020/21	2021/22	2022/23
Brighton & Hove	45.2	36.5	43.8
East Sussex	77.3	73.7	74.8
West Sussex	139.5	118.3	85.4

Table Seven: Primary coded diabetes admissions (non-DKA) by place per 100,000 population. 2020/21 – 2022/23. Source SUS data.

- 57. Benchmarking for non-DKA diabetes admissions on the model healthcare system is available through a monthly metric detailing the number of non-elective admissions with hypoglycaemia. As with DKA benchmarking this is only available at a provider level, rather than place and therefore the picture is distorted through UHSx providing in-patient services for people living outside Brighton and Hove. April 2024 data shows a national provider median of 41, with UHSx showing a value of 84, placing them in the highest (worst performing) quartile. As a system, Sussex sits with a value of 152, against a national system median of 140.
- **58.**Overall Brighton and Hove performs favourably in comparison to the rest of Sussex, and nationally, in data pertaining complications because of poorly managed diabetes. The rate of both major and minor amputations; admissions due to DKA; and admissions due to hypoglycaemia is lower in Brighton and Hove than the rest of Sussex.

Next Steps

- 59. Moving through this year and beyond, work in Sussex will continue to enable access to non-prescribable technology for management of type 1 diabetes. This work will be informed by, and align with the national HCL plan, with implementation ensuring there is a strategy to address any known or emerging inequities of access as roll out of HCL progresses.
- 60. For CGM to support around 400 people living with type 2 diabetes in Brighton and Hove, the diabetes clinical reference group alongside an NHS Sussex team are working to develop an approach that will improve access for all and especially those most disadvantaged. This is taking a phased approach, technology to the most clinically vulnerable who have their care managed by specialist services in UHSX and SCFT and then spreading this out to practices in Brighton and Hove.
- 61. Work to address variation in service provision will continue. As the new LCS matures, data will be reviewed to enable targeted support at practice level to further improve outcomes for the population. As Integrated Care Teams (ICTs) develop, diabetes services will form part of their core offer to their population. Diabetes prevention will also be an integral part of this offer, working in collaboration with public health and wider community services to support people living at risk of developing type 2 diabetes.

Implications

Financial Implications

62.NHS England have written to all ICB's detailing an indicative allocation for year one of HCL implementation directly linked to a 75% reimbursement scheme. Further detail is expected in September 2024, which will support financial modelling. Sussex has noted efficiencies in diabetes technology can be realised through procuring non-prescribable devices through the national HCL procurement framework and is collaborating with specialist providers to shift procurement across to this to support HCL implementation.

Legal Implications

- 63. Although NICE clinical guidelines are regarded as best practice in England and should be considered to facilitate shared decision-making between patients and healthcare providers, there is no legal requirement for funding. This applies to both NG17 (Type 1 diabetes in adults: diagnosis and management) and NG28 (Type 2 diabetes in adults: management).
- **64.** The NHS is legally obliged to fund and resource medicines and treatments recommended by NICE's technology appraisals. This applies to TA943, Hybrid closed loop systems for managing blood glucose levels in type 1 diabetes.

Risks

- **65.** Without tackling the current challenges in accessing diabetes technology there is a risk that the current position will continue and further exacerbate the known inequalities. This risk has been mitigated through:
 - Aligning Sussex HCL implementation with the national plan to ensure we are aligned with peers.
 - Implementing Blueteq to enable data collection of technology provision enabling targeted approach to ensure all people living with diabetes have access to the technology they are eligible for to empower them to self-manage their condition.
 - Ensuring implementation of all technology in Sussex is clinically led to guarantee the most vulnerable and complex people are prioritised.
 - Collaborating with all specialist providers to develop HCL implementation plans in Sussex.

Quality and Safety Implications

- 66. A Quality Impact Assessment (QIA) has been undertaken looking at access to all non-prescribable diabetes technology in Sussex. The QIA recognises diabetes technology as having a positive impact on patient safety acknowledging the positive impact on diabetes outcomes and a potential reduction of preventable risk and harm. The QIA recognises the need to develop agreed governance processes to support delivery of diabetes technology, and the importance of ensuring training and competencies to guarantee development of a skilled workforce to deliver diabetes technologies. The assessment was carried out in 2022 and is due an update in Q3 of 2024/25.
- 67. From a clinical effectiveness, patient safety, and patient experience perspective the outcomes of implementing CGM in management of type 2 diabetes include improved glycaemic control, reduced mental burden, and positive clinical results. Patients experience better blood glucose management, and an enhanced quality of life.

Equality, diversity, and health inequalities

68.A national Equality Health Impact Assessment (EHIA) is expected as part of the HCL work programme, but in the interim a Sussex EHIA has been undertaken. Refinements to the Sussex Diabetes EHIA will also be made when data emerges from NDA submissions to ensure the current inequalities are reflected within the assessment.

69. For CGM to support people living with type 2 diabetes the current EHIA has also been updated.

Patient and public engagement:

70. Engagement networks are in place for the Diabetes Clinical Network to approach to understand the patient and public lens on this work. Diabetes UK are on the membership of the diabetes programme board and the clinical reference group and can advocate for the diabetes population at these forums. Working in collaboration with VCSE who engage with both the service user and public supports the programme with outputs used to refine the approach.

Conclusion

- **71.** As an outcome of the scrutiny committee investigation, DUK has requested policies in place to enable access to technology for all people living with diabetes living in Brighton and Hove.
- **72.** Brighton and Hove are fully compliant with NICE guidance for type 1 diabetes, with a high baseline position for the implementation of HCL technology.
- 73. There remains further work in relation to expanding technology access for the 400 people with type 2 diabetes in Brighton and Hove and this is part of a wider review for transforming our care for people with diabetes, the recent implementation of the new single LCS in primary care being the first step.
- 74. We recognise there is further opportunity for continuous improvement of outcomes for people living with diabetes in Brighton and Hove. There is commitment to continue to transform diabetes care for our population through collaboration with key stakeholders and ensuring that high quality diabetes care, including a focus on prevention, becomes a key offer within our emergent Integrated Community Teams.

Glossary

CGM	Continuous Glucose Monitoring
	Systems that monitor blood glucose. These devices are worn continuously on the body and provide a glucose reading to a smart phone or reader.
СР	Care Processes
	Care processes recommended bu NICE and recorded in the NDA that should be completed for all people living with diabetes annually.
CSII	Continuous Subcutaneous Insulin Infusion (pumps)
	A pump that provides a steady stream of insulin to the body, with the person needing to test blood sugar levels, adjusting administration rate of the pump, and delivering boluses as needed.
DKA	Diabetic ketoacidosis
	A life-threatening complication of diabetes, usually seen in people living with type 1 diabetes
HCL	Hybrid Closed Loop (Systems)
	A system that comprises of a CGM device, and a CSII pump linked to a computer algorithm that can adjust the amount of insulin needed based on glucose readings.
NDA	National Diabetes Audit.
	A major national clinical audit, which measures the effectiveness of diabetes healthcare against NICE Clinical Guidelines and NICE Quality Standards.
NG	Nice Guidance
	NICE guidance is developed with health care professionals and people who use services to help with decision making on prescribing and recommended treatment.
TA	Technology Appraisal
	Technology Appraisals are based on a review of clinical evidence and cost effectiveness, with a statutory responsibility for the NHS to make funding available for a recommended drug or treatment with a TA, normally within three months (unless otherwise specified)
TTT	Three Treatment Targets
	Targets for the three main risk factors for diabetes complications, attainment of which is recorded annually for all people living with diabetes.