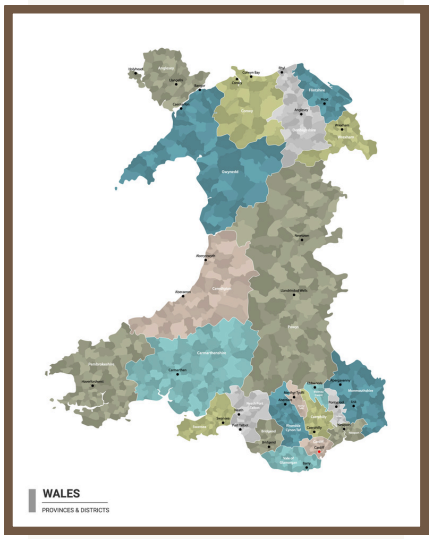
CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD 5-YEAR DIABETES STRATEGIC ACTION PLAN

2025 - 2030

EXECUTIVE SUMMARY

The Cwm Taf Morgannwg University Health Board (CTMUHB) 5-year Diabetes Strategic Action Plan aims to deliver a cohesive, evidence-based approach to diabetes prevention and management across all services and settings and across the life course. This plan addresses the current diabetes landscape in CTMUHB, highlighting service gaps and priorities to improve diabetes care and outcomes.

Diabetes is a significant health issue, affecting over 200,000 people in Wales. Diabetes is associated with severe complications such as sight loss, kidney failure, heart attacks and strokes, and up to 10 years reduced life expectancy. Diabetes is associated with considerable financial cost: in 2011 the management of diabetes was estimated to account for 10% of the annual NHS budget, with 80% of this attributable to the complications of diabetes. This cost has continued to increase since 2011, and is projected to rise to over 17% of the total NHS budget by 2035.



CTMUHB has one of the highest diabetes prevalence in Wales – 8.1% have type 2 diabetes and 0.6% have type 1 diabetes. The prevalence of type 2 diabetes is increasing, driven by obesity and other risk factors, and it is estimated that by 2035/36, 1 in 11 adults in Wales will be living with diabetes.

Diabetes prevention and diabetes care is delivered by a range of different specialties and healthcare professionals across primary, community and secondary care settings in CTMUHB. The new CTMUHB Strategic Diabetes Programme has been developed to facilitate the delivery of a co-ordinated, evidence-based and equitable diabetes service across the whole of CTMUHB.

CTMUHB VISION FOR DIABETES

The diabetes programme in CTMUHB has three strategic objectives:

1. Prevent or delay the onset of T2DM in those with modifiable risk factors
2. Prevent poor outcomes through effective diabetes care
3. Ensure equitable provision of all aspects of the diabetes pathway in CTMUHB

A Diabetes Strategic Programme Board has been established to provide strategic oversight, guidance and challenge. A Diabetes Operation Board will oversee and monitor delivery of this 5-year strategic plan via the co-ordination of 5 workstreams.

GAP ANALYSIS

A gap analysis comparing current provision in CTMUHB with National requirements and gold standard guidelines has been completed and has informed the development of key priorities for diabetes in CTMUHB.

PRIORITIES FOR DIABETES IN CTMUHB

The overarching priorities for years 1-3 are:

1. Review all diabetes services across CTMUHB to ensure services are high quality, evidence-based, equitable and meet the Welsh Government Quality Statement for diabetes and NICE guidelines.
2. To deliver service innovation that improves patient outcomes and diabetes management through harnessing new and emerging technologies and modernising diabetes services.
3. To develop, deliver and evaluate diabetes prevention and remission services in CTMUHB, ensuring core funding is secured from 2026 onwards.
4. To strengthen co-production and engagement with people living with diabetes across our communities.
5. To develop a diabetes data dashboard that supports implementation planning and monitoring and meets Welsh Government reporting requirements.

NEXT STEPS

Workstream leads will develop annual plans outlining key deliverables and metrics mapped against the key priorities. The Diabetes Operational Board will be responsible for collating the overarching plan and reviewing implementation via quarterly progress reports.

Future publication of new or updated National guidance, policies or Welsh Government mandates relating to diabetes may require this strategic plan to be updated within the next 5 years. Any update to this strategic plan will need to be agreed by the CTMUHB Diabetes Operational Board and formally signed off by the CTMUHB Strategic Diabetes Programme Board. During Quarter 3 of year 2, all workstreams and boards will review the priorities and progress made towards achieving these in order to set priorities for year 3-5.

CONTENTS

CONTENTS

1. INTRODUCTION

This strategic plan has been developed to ensure that Cwm Taf Morgannwg University Health Board (CTMUHB) delivers a high-quality cohesive, evidence-based approach to diabetes prevention and management across all services and settings, and across the life course.

It outlines the current diabetes picture in CTMUHB, summarises our service provision compared to gold-standard guidance and national recommendations, and highlights key challenges and areas for improvement.It lays out the steps required to tackle these challenges and improve all aspects of diabetes prevention and care at a local level, including how we will work with partners to take forward an all-Wales approach to prevention and optimal management of diabetes.

2. BACKGROUND

Diabetes is one of the leading health issues of our age, with those affected experiencing a host of complications, reduced quality of life and reduced life expectancy. It is a major draw on NHS resources and impacts the wider economy through ill-health and unemployment.

More than 200,000 people in Wales are living with diabetes. 9 out of 10 of them have type 2 diabetes (T2DM), and approximately half of these could have been prevented with lifestyle change to achieve a healthy weight, a better diet and increased physical activity.

People living with diabetes are at risk of sight loss, kidney failure, limb amputation, heart attacks and stroke alongside a number of other potentially serious acute and chronic complications.

Diabetes is associated with considerable financial cost: in 2011 the management of diabetes was estimated to account for 10% of the annual NHS budget[1],with 80% of this attributable to the complications of diabetes. This cost has continued to increase since 2011, and is projected to rise to over 17% of the total NHS budget by 2035.

In order to tackle the growing issue of diabetes, work to prevent diabetes and to ensure delivery of effective evidence-based care must both be prioritised.

Diabetes is a condition in which the body doesn't produce enough insulin to maintain stable blood glucose levels, or where the insulin produced is unable to work effectively[2]. There are two main types of diabetes:

- **Type 1 diabetes (T1DM)** an autoimmune condition where the cells that produce insulin are destroyed. Lifelong insulin treatment is required to prevent death. Approximately 10% of people with diabetes have type 1 diabetes[2].

- **Type 2 diabetes (T2DM)** is when the body doesn't produce enough insulin for its needs or becomes resistant to the effects of the insulin produced. This condition may remain undetected for many years but is progressive and will require lifestyle changes (healthy diet and exercise). Over time most people will require oral medication +/- insulin[2].

In addition, gestational diabetes (GDM) occurs when the body cannot produce enough insulin to meet extra needs during pregnancy and can cause complications during pregnancy for mother and child. GDM usually resolves at the end of pregnancy, however one third of women who develop GDM will develop Type 2 diabetes within 5 years[3].

'Non-diabetic hyperglycaemia', or 'pre-diabetes', is a condition characterised by higher-than-normal blood glucose levels, but below the current threshold for a diagnosis of diabetes. Individuals with pre-diabetes also develop complications related to raised blood glucose and they are at high risk of developing type 2 diabetes, with between 26% and 50% of people with pre-diabetes developing type 2 diabetes within 5 years[4].

2.1 RISK FACTORS FOR DEVELOPMENT OF DIABETES

There are currently no lifestyle changes or modifiable risk factors known to prevent the development of T1DM, but there are a number of modifiable risk factors associated with development of diabetes-related complications[2]. Whilst significant progress is being made in the prevention and delay of T1DM by immunotherapy treatment, to date there is no National screening programme for T1DM in the UK.

Key risk factors for development of pre-diabetes and T2DM include:

1. Living with overweight or obesity – the main modifiable risk factor
2. Increasing age
3. Certain ethnic groups (South Asian, Black African, African Caribbean)[5]
4. Low levels of physical activity
5. Family history of type 2 diabetes

Living with overweight or obesity (BMI 25+) is the main modifiable risk factor for T2DM[2] with the risk of T2DM increasing alongside increasing BMI. Research shows in individuals with low genetic risk of T2DM, those with obesity had over 6 times the risk of developing T2DM compared to people of a healthy weight[6].

Children and adolescents living with obesity are around five times more likely to have obesity in adulthood than people with a healthy weight[7]. Around 55% of children with obesity continue to have obesity into adolescence; around 80% of adolescents with obesity continue to live with obesity into adulthood and around 70% will have obesity aged over 30 years.

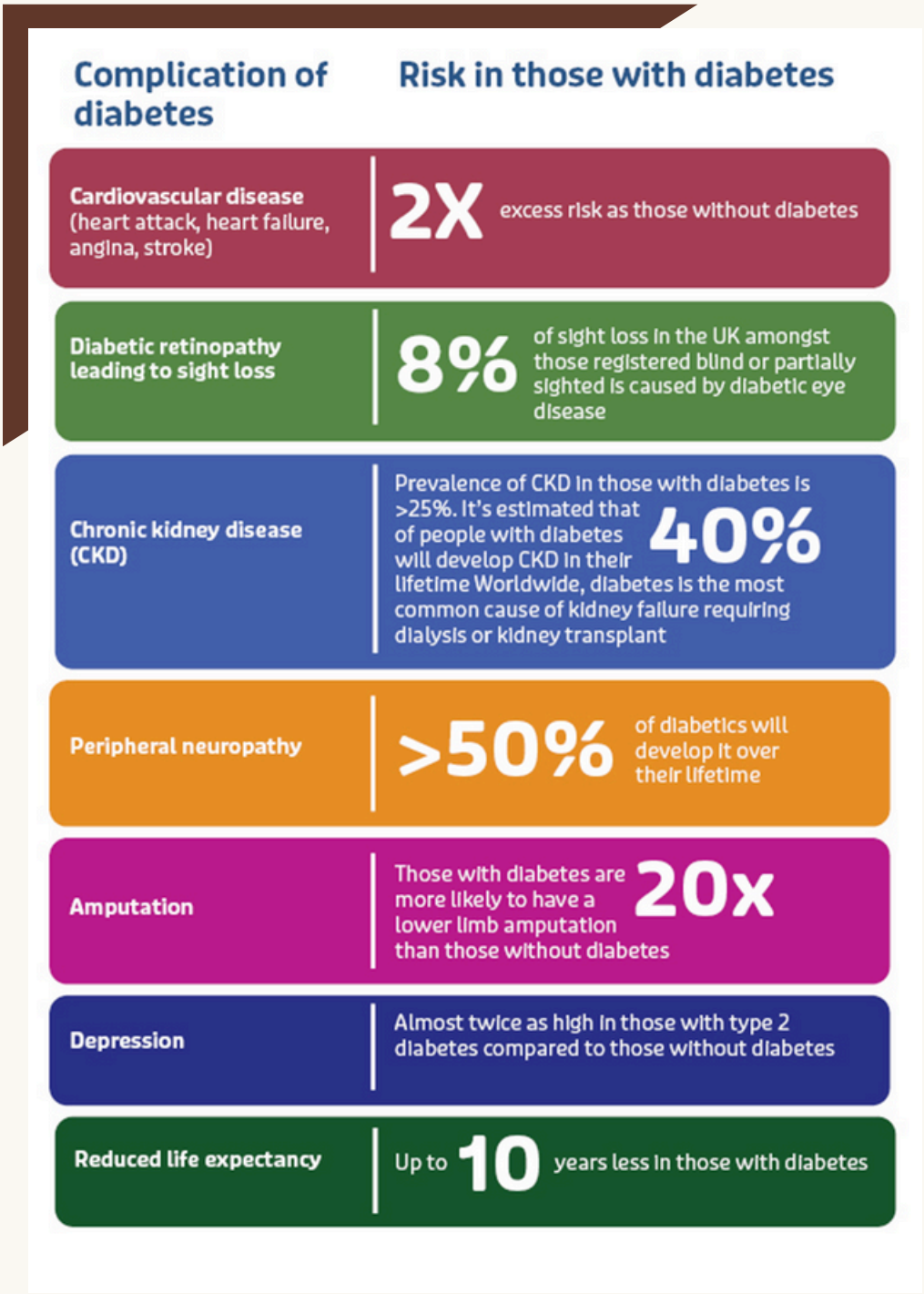
T2DM in children is uncommon, but the causes are the same as in adults, with the main risk factor having overweight or obesity[8].

Women with obesity are 3 to 4 times more likely to develop GDM than those of a normal weight[9]. GDM is also more common in those who've had GDM in a previous pregnancy, those who've previously given birth to a baby over 4.5kg, those with a family history of type 2 diabetes, and those of certain ethnic groups (South Asian, Black African, African Caribbean)[10].

2.2 COMPLICATIONS OF DIABETES

Diabetes is associated with a number of potential complications outlined in Figure 1. The risk of such complications is higher in those with difficulty managing their diabetes, those with obesity and those in the most deprived quintiles[2]. Those living with diabetes also have up to 10 years reduced life expectancy compared to those without diabetes[11].

Figure 1: Complications of diabetes[2, 11]



2.3 CURRENT COST OF CARE OF DIABETES IN CTMUHB

Diabetes medication creates a substantial cost to health services. The NHS Executive's Diabetes Insight & Variation Atlas (DIVA) shows that CTMUHB has the highest prescribing costs and number of items prescribed per 10k of the population in Wales, accounting for £5m out of the £33m all-Wales spend on diabetes medication[12]. Further work is required to gain a more detailed understanding of our diabetes costs locally.

3. NATIONAL POLICY CONTEXT

3.1 WELSH GOVERNMENT QUALITY STATEMENT FOR DIABETES

In June 2023 Welsh Government (WG) published a Quality Statement for Diabetes which sets out key planning and expectations for diabetes services[13]. Quality of diabetes care will be monitored through the NHS Value-Based Healthcare diabetes dashboard, the Primary Care Information Portal (PCIP)[14] and the National Diabetes and National Paediatric Diabetes Audits (NPDA)[15].

The Quality Statement for Diabetes sets out 24 actions, 20 of which are the responsibility of health boards to implement. Appendix 1 outlines the 24 quality statements in detail but in summary they aim to ensure that diabetes care is:

- Equitable
- Safe
- Effective
- Efficient
- Person-centred
- Timely[13]

3.2 NATIONAL STRATEGIC OUTCOMES FOR DIABETES

Addressing the significant impact of diabetes has been recognised as a priority at both National and local level. The NHS Leadership Board in December 2023 agreed the following two strategic outcomes:

By December 2028 Wales would:

1. Have more people living well with diabetes (T1DM and T2DM) as measured through a reduction in amputations and other diabetes pathways.
2. Have stopped the prevalence of diabetes increasing, focusing principally on T2DM.

The National Value Based Healthcare Board is developing key all-Wales metrics (see appendix 2) to be reported against which map to their below 5-stage model optimising high impact interventions:

3.3 TACKLING DIABETES TOGETHER PROGRAMME

The 'Tackling Diabetes Together Programme' launched by Public Health Wales (PHW) in 2024 has 6 work streams that will help achieve the two National strategic outcomes[16]. A summary of the priorities of the Tackling Diabetes Together Programme workstreams are outlined in appendix 1.

3.4 NATIONAL STRATEGIC CLINICAL NETWORK FOR DIABETES

The National Strategic Clinical Network for Diabetes forms part of the NHS Wales Executive, and guides the implementation of the national diabetes delivery plan. Their five-year plan sets out 10 areas for action from 2024 to 2028 ranging from preventing T2DM and remission services, to adoption of technology to support people living with T1DM better manage their diabetes. The National Strategic Clinical Network for Diabetes is accountable for leading the Tackling Diabetes Together workstream related to effective diabetes care. A summary of their 5-year and 2025/26 action plans can be found in appendix 1.

3.5 NATIONAL CLINICAL PATHWAYS

NHS Wales Executive have published 7 national diabetes clinical pathways[17] covering the following aspects of diabetes prevention and care that health boards are expected to implement and adhere to:

- T1DM pathway
- T2DM diabetes pathway in primary care
- Transitional and handover care for young adults under 25 years
- Foot care pathway
- Prevention programme pathway
- Diabetes psychology pathway
- Gestational diabetes guideline

3.6 NATIONAL AND INTERNATIONAL GUIDELINES

The National Institute for Health and Care Excellence (NICE) has published guidelines and quality standards regarding the management of T1DM[18, 19], T2DM[20, 21], diabetes in children and young people[22, 23] diabetes in pregnancy[24, 25], and prevention of T2DM[26, 27]. There are also key NICE guidelines relevant to reduction of complications[28, 29].There are a number of other national and international guidelines relevant to diabetes, a summary of these guidelines is outlined in appendix 3 and 4.

4. CURRENT SITUATION IN CTMUHB

4.1 POPULATION DATA: PREVALENCE OF DIABETES AND PRE-DIABETES

At 8.69%, CTMUHB has the second highest prevalence of diabetes of all health boards in Wales. 8.1% of the registered population in CTMUHB have a diagnosis of T2DM or other diabetes, and 0.6% have a diagnosis of T1DM.

Although the prevalence of both T1DM and T2DM is predicted to increase, it is the rise in diagnoses of T2DM that is predominately driving this upward trend. PHW forecast the number of individuals in CTMUHB with T2DM to increase from 31,163 in 2023/24 to 32,564 in 2026, with the estimated prevalence of T2DM increasing to 8.6% in 2026. If current trends continue, it is estimated that by 2035/36 approximately 1 in 11 adults in Wales will be living with diabetes[30].

Of major concern is the anticipated obesity driven rise in the prevalence of T2DM and the fact that T2DM is now being diagnosed at a younger age, even in children and young people. The number of children registered with T2DM and being treated in paediatric diabetes units in England and Wales increased by more than 50% between 2017 and 2022[31]. Early onset of T2DM is associated with more aggressive disease, faster disease progression, and more rapid onset of complications at a younger age, threatening long-term health and quality of life in adulthood[32].

Between April 2023 and March 2024 5.5% of women who gave birth in CTMUHB were recorded as having gestational diabetes. This has increased from 4.1% in 2018/19.

In January 2025, 18,031 adults in CTM (3.95%) were coded as having a diagnosis of pre-diabetes in the Primary Care Information Portal (PCIP)[14], with new cases of pre-diabetes being diagnosed each week. As pre-diabetes usually has no symptoms and detection is dependent on an individual having a HbA1c or blood glucose result in the pre-diabetes range, it is estimated that the true number of people with pre-diabetes in CTMUHB far exceeds this. The true forecast for increase in pre-diabetes prevalence is unknown and likely to be vastly underestimated[33].

4.2 POPULATION DATA: PREVALENCE OF RISK FACTORS FOR DIABETES/PRE-DIABETES

CTMUHB has the highest prevalence of overweight and obesity in Wales and the highest percentage of people with T2DM with a BMI 40+. Around 2 in 3 adults in CTMUHB are living with overweight or obesity, and around 1 in 3 are living with obesity[34]. In December 2024, 53% of pregnant women newly booked with antenatal services in CTMUHB had a BMI 25+ and 29.8% had a BMI 30+.

A major concern is that one in eight 4-5-year-olds in CTMUHB start their school journey with obesity, and more than one in four are overweight[34]. This is the highest rate of child obesity in Wales.

Rates of child obesity and overweight are particularly high in Rhondda Cynon Taf and Merthyr Tydfil County Borough Council areas.

Healthy weight is strongly linked to deprivation. Children in our poorest communities in CTMUHB are 50% more likely to be living with obesity than children in our most affluent areas. Therefore, significant work to support children in areas of deprivation will be needed if we are to address the inequalities that already exist.

Low levels of physical activity also contribute to obesity and increased risk of T2DM. The National Survey for Wales 2022/23 data indicates that only 53% of our adult population in CTMUHB meet physical activity level recommendations, which is below the Welsh average of 56%[35]

4.3 POPULATION DATA: PREVALENCE OF DIABETES COMPLICATIONS

The Primary Care Information Portal (PCIP) All-Wales Diabetes Module provides an overview of the percentage of those age 17+ with diabetes with different diabetes-related complications as recorded in the GP records[14]. Table 1 summarises this data for key diabetes-related complications in CTMUHB compared with Wales.

Table 1: Percentage of those age 17+ with diabetes in CTMUHB and Wales that had a diagnosis of a diabetes-related complication recorded in their primary care record in January 2025 as recorded in the PCIP[14]

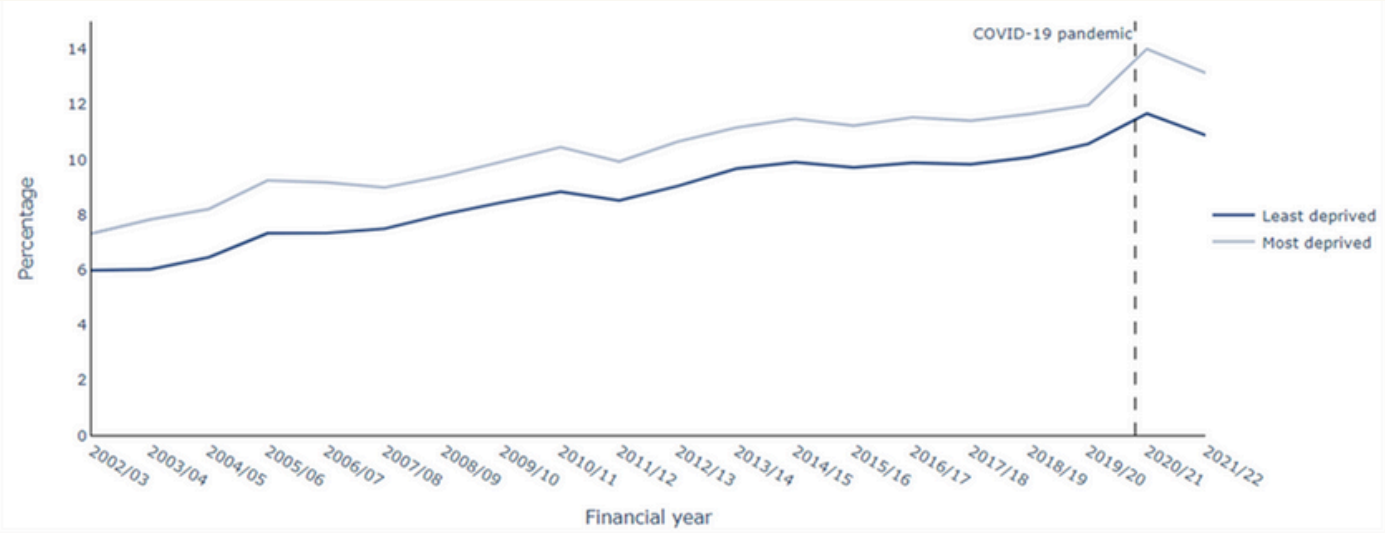
Diabetes-related complication	*CTMUHB*	*Wales*
Any cardiovascular disease (T2DM/other)	27.03%	26.97%
Coronary Heart Disease (T2DM/other)	16.73%	16.15%
MI/acute coronary syndrome (T2DM/other)	8.01%	8.30%
Chronic kidney disease (T2DM/other) Stage 3a	21.30%	22.49%
Heart failure (T2DM/other)	6.19%	7.07%
CVA (T2DM/other)	5.45%	5.38%
TIA (T2DM/other)	4.54%	3.96%
Peripheral arterial disease (T2DM/other)	3.01%	3.44%
Diabetes-related foot condition (T1DM & T2DM)	7.52%	6.48%
Diabetic retinopathy diagnosed in previous 15 month	4.94%	5.43%

The All-Wales Diabetes Insight and Variation Atlas (DIVA) provides further data regarding inpatient admissions for amputation in those with diabetes, for the whole of Wales and at an individual health board level. During 2023/24, 84 adults with diabetes in CTM were admitted to hospital on the amputation pathway, costing £13,000 on average per hospital stay or 'spell'. 58% of these individuals were admitted as an emergency and the average length of stay was 16 days. In 2023/24 15.5% of those admitted through the amputation pathway in CTMUHB died within one year of discharge, compared with 20% across Wales[12].

4.3.1 HOSPITAL ADMISSIONS

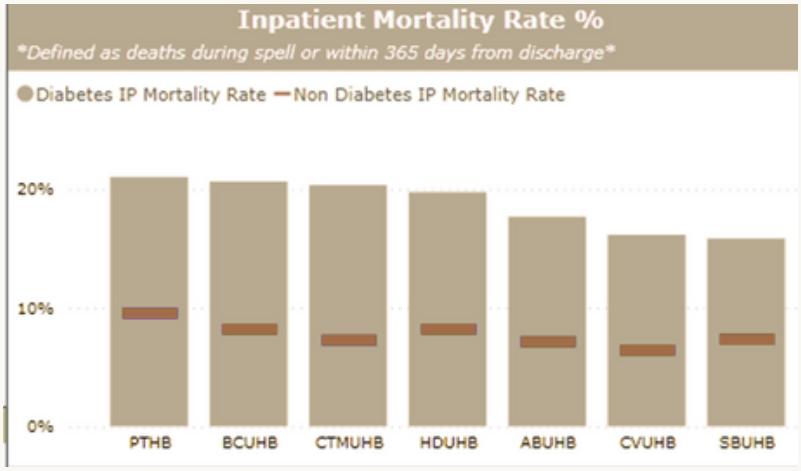
IIn 2021/22 over 20% of all hospital admissions for persons age 65-74 and 75+ in CTMUHB included diabetes as a primary or secondary diagnosis. There has also been a steady rise in hospital admissions including diabetes as a primary or secondary diagnosis for those age 45-64 years since 2002/03. Between 2002/03 and 2021/22 the percentage of all hospital admissions in CTMUHB that include a primary/secondary diabetes diagnosis increased in both the most and the least deprived fifths, but over the past few years the gap between these deprivation fifths has increased – see Figure 2[36].

Figure 2: Percentage of total inpatient admissions with any mention of diabetes by deprivation, persons all ages, Cwm Taf Morgannwg UHB, 2002/03 to 2021/22. Produced by PHW using PEDW (DHCW) & WIMD (Welsh Government)[36]



According to 2023/2024 NPDA data, there were 25 CYP diagnosed with Type 1 diabetes across CTM, 26% of which presented with DKA. This rate of DKA at T1DM diagnosis has remained stable[15]. Local CTM data is being captured to understand the reason for these individuals presenting with DKA in order to inform the development of interventions with the aim of preventing late presentation of T1DM in children and young people.

4.3.2 MORTALITY

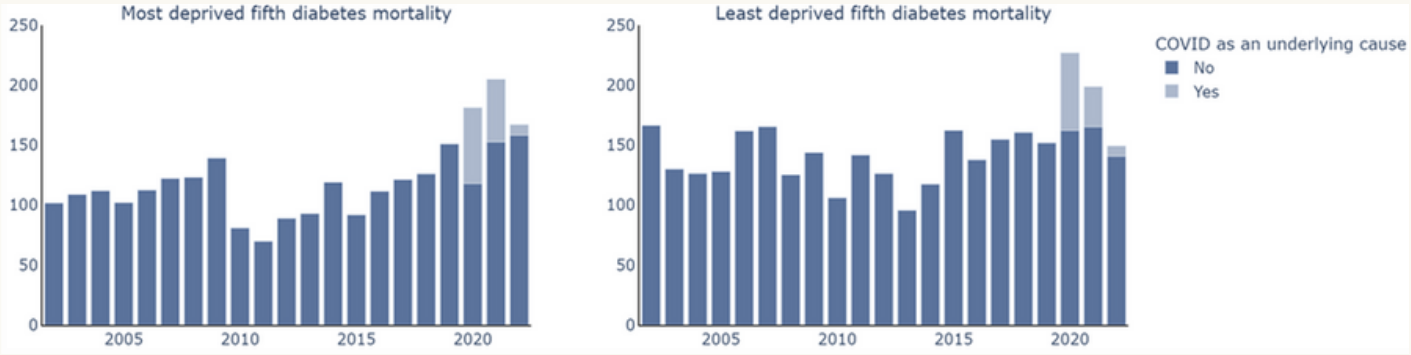


When comparing inpatient mortality for 2022/23 in those with diabetes to those without diabetes, deaths during the hospital spell or in the year following admission are significantly higher in those with diabetes – 20.32% compared to 7.26% of all inpatients – see figure 3[12].

Figure 3: Inpatient Mortality Rates - people with diabetes compared to people without diabetes 2022/23; DIVA[12]

There is little difference in mortality with any mention of diabetes between the most and least deprived deprivation fifths in CTMUHB. Mortality in both deprivation fifths has shown an overall increase since 2002 – see Figure 4[36].

Figure 4: Deaths with any mention of diabetes by deprivation, European Age Standardised Mortality Rate per 100,000, persons all ages, Cwm Taf Morgannwg UHB, 2002 to 2022. Produced by PHW using PEDW (DHCW) & WIMD (Welsh Government)[36]



4.4 EQUITY AND ENGAGEMENT

Two important crosscutting elements of the diabetes programme in CTMUHB are equity and engagement which need to be considered at each step in the diabetes pathway, and within each clinical service and activity.

Welsh Government Diabetes Quality statements 4 and 20 outline the importance of ensuring service delivery is equitable and care is co-produced with people living with diabetes.

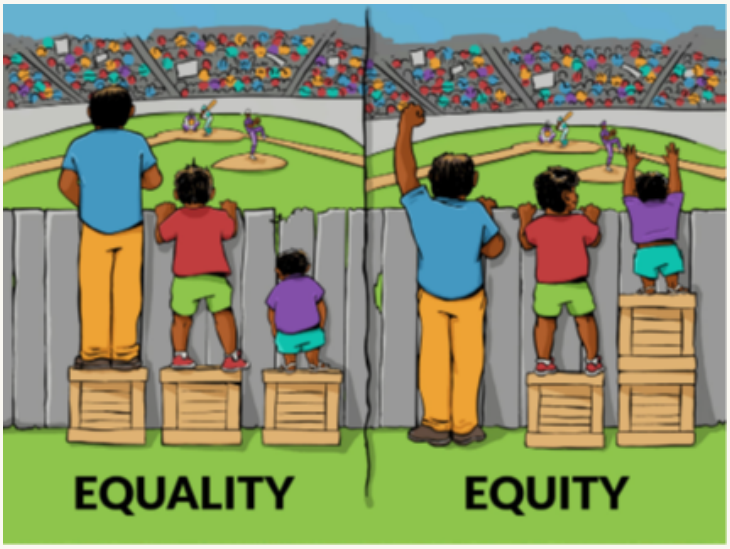
4.4 .1 EQUITY

Health equities refer to those inequalities that are avoidable.
When looking at T2DM through an equity perspective it is evident that there are differences across our population in terms of the prevalence of diabetes and the levels of deprivation, behavioural and clinical

risk factors that contribute to it. There are also many factors that influence how well individuals are motivated and able to manage their diabetes.

Promoting equity isn't just about ensuring everyone has equal service provision. It is recognising the challenges and needs of different groups and trying to accommodate them into service design and delivery.

There is currently no routinely available data to fully assess equity of diabetes prevention and management services, particularly data relating to groups that might be at higher risk of diabetes and its associated complications or those that find difficulty engaging with and/or accessing healthcare services.



4.4.2 ENGAGEMENT

Engagement is increasingly recognised as an integral part of health care and a critical component of patient centred care. There are potentially a number of different activities and aims that come under the engagement banner. Key examples include:

1. Increasing the knowledge and understanding in the wider population about the risks and potential complications associated with diabetes
2. Ensuring individuals with diabetes/pre diabetes and their families are fully informed about their condition and understand their care while promoting a culture of mutual decision making and accountability
3. Developing effective systems for patient feedback, incident reporting and staff reflection and put mechanisms in place to ensure findings influence ongoing service development
4. Develop mechanisms to allow those with diabetes and wider stakeholders the opportunity to contribute to the development and review of services and policies at a system level
5. To ensure all of the above actions take into account the requirements and representation from groups with additional/differing needs

Diabetes structured education programmes across CTMUHB provide individuals with diabetes and their parents/carers information about their diabetes diagnosis and care.

The National Diabetes PROMs for T1DM and T2DM will be digitally implemented across CTMUHB, as well as a locally developed PREM and specific PROM for Diabetes Podiatry. Triangulating these Value-Based Healthcare measures and activity will support triaging, determining urgency of care based on risk, supporting those waiting for review and treatment, and track patient health outcomes and experience for individuals and for the CTMUHB diabetes population cohort.

Diabetes support groups in the CTMUHB footprint regularly provide updates on the barriers that individuals living with diabetes face and potential solutions to improve diabetes care by engaging with their members and the wider community. However, the reach of these groups is limited and their feedback is unlikely to represent the breadth of views of the population of CTMUHB living with diabetes.

4.5 SUMMARY OF CURRENT SERVICE PROVISION IN CTM

- Diabetes prevention and diabetes care are currently delivered by a range of different specialties and healthcare professionals across primary, community and secondary care settings and at HMP Parc.

4.5.1 DIABETES PREVENTION AND CASE FINDING

T2DM prevention is primarily focused on:

- prevention of overweight and obesity
- supporting those with overweight or obesity to eat a healthy diet, increase physical activity, reduce abdominal obesity and to develop and maintain a healthy BMI
- identifying those at higher risk of developing diabetes and testing them for diabetes
- referring those with high risk of developing T2DM (pre-diabetes) to a lifestyle change programme to support them to reduce their risk
-

The All-Wales Adult Weight Management Pathway (2021) has recently been implemented in CTMUHB with the provision of a new level 2 and 3 service for adults[37]. Current capacity of this new level 3 adult service is insufficient to meet the needs of the CTMUHB population and has limited prescribing capacity. There are currently no level 1-3 children and young people weight management services operating equitably across CTMUHB. This weight management pathway is not a diabetes specific pathway and its delivery lies outside the scope of the CTMUHB diabetes programme. However, sufficient capacity of an evidence-based weight management pathway is essential to prevent the development of T2DM and pre-diabetes in the general population, and as an additional intervention for those with overweight or obesity that have been diagnosed with pre-diabetes or diabetes.

Case finding for type 2 diabetes in CTMUHB is mostly undertaken in primary care during annual reviews of patients with established cardiovascular disease and within the CTMUHB health check programme. The health check programme follows the two-stage case finding strategy recommended by NICE, offering eligible individuals three yearly health checks[26]. There is no routinely available data to review the completeness of case-finding in primary care annual reviews. Individuals at high risk of diabetes that fall outside these two main approaches are not routinely offered case finding in CTMUHB. Further work is needed to develop a cohesive evidence-based case finding approach for diabetes in CTMUHB.

The **All-Wales Diabetes Prevention Programme (AWDPP)** is implemented within two GP clusters in CTMUHB and between October 2022 and December 2024 had an uptake of 60% (Wales average 48%). This programme needs to be rolled out across CTMUHB and at HMP Parc and equity of uptake reviewed. There are plans to implement roll out across CTMUHB in 2025-26 but there is only fixed term funding secured until March 2026.

There is no core funded **T2DM remission service** available in CTMUHB as recommended in the Welsh Quality Statement for diabetes[13]. Value Based Healthcare funding has been secured for 2025-27 to establish and evaluate a remission service for adults with T2DM in CTMUHB.

4.5.2 DIABETES EDUCATION AND SUPPORT

Provision of structured diabetes education for adults with type 1 and type 2 diabetes is variable across CTMUHB. Delivery of the SEREN at diagnosis structured diabetes education programme for children is implemented whilst an inpatient over a 5-day period for the majority of CYP newly diagnosed with diabetes in CTMUHB. This model is implemented to ensure that CYP and their families receive a substantial amount of education and opportunity to become familiar with the practical management of diabetes at diagnosis as an inpatient. Uptake of this programme across CTMUHB is higher than the uptake of adult programmes, but due to staff capacity there is no regular provision of SEREN Active+ or SEREN pumps courses at CTMUHB, and uptake of structured education programmes for young people (Moving to year 7 and SEREN Connect) are much lower than those delivered at diagnosis – see appendix 3 for more detail.

Adults with T1DM resident in Merthyr and RCT can access the 5-day structured education course DAFNE which is delivered at PCH and RGH. Due to a lack of dietetic capacity at POW, DAFNE is not available for Bridgend residents with T1DM who are as an alternative offered access to Carbohydrate Counting education group sessions. Adults with T2DM across CTMUHB can access a variety of education options, including the 6-week X-PERT diabetes structured education, X-PERT insulin, a single dietetic assistant led group session (Diabetes Awareness Session – DAS), and individual education.

Further work is needed to ensure the equitable provision of evidence-based structured diabetes education for children, young people and adults with T1 and T2DM in CTMUHB.

There are two patient and parent/guardian support groups for children and young people with diabetes and one support group for adults with diabetes in CTMUHB. These both provide support to individuals/families and engagement opportunities for the UHB to improve and develop diabetes services. Further work is required to engage with individuals living with diabetes in CTM to understand the need to develop additional diabetes support services/groups across CTMUHB.

4.5.3 DIABETES MONITORING AND TREATMENT SERVICES

Care of those with diabetes starts from pre-conception, continues to end of life, and involves a wide range of healthcare professionals across primary, community and secondary care. As a result, the provision of diabetes care can be fragmented and uncoordinated, with health professionals working in silos, patient information recorded on different clinical information systems, and individuals with diabetes trying to navigate through a complex healthcare system. The new CTMUHB Diabetes Programme has been developed to facilitate the delivery of a co-ordinated, equitable, high-quality, evidence-based and adequately resourced diabetes service across the whole of CTMUHB.

Diagnosis and routine monitoring of adults with T1DM and T2DM plus the management of adults with T2DM is primarily undertaken in Primary Care by General Practitioners and Practice Nurses, with support from the Community Diabetes Specialist Nursing Team.

Primary Care has recently identified the need for focused work to improve uptake and completeness of diabetes annual reviews, including monitoring of all 8 essential care processes. As of 1/2/25, 42.11% of adults with diabetes in CTMUHB had all 8 care processes recorded within the previous year. Adults with T1DM had 21.61% uptake compared to 43.69% in those with T2DM, although this uptake is based solely on data extracted from primary care clinical systems. Measurement of Urine ACR and foot surveillance had the lowest uptake[12]. There is significant practice and cluster-level variation in uptake of all 8 care processes across CTMUHB – see appendix 3 for more detail.

There is currently no CTMUHB T2DM pathway – prevention through to glucose management – implemented across Primary Care and, whilst it is assumed, it is unknown whether NICE T2DM management guidelines[20, 21] are being fully implemented at a practice level across the UHB. Further work is thus needed to develop an equitable and sustainable model of care for T2DM within Primary Care.

Management of adults with T1DM, young adults with T2DM, those with complex T2DM, prenatal counselling, management of diabetes in pregnancy, management of complex diabetic foot disease, and care for people with diabetes during their inpatient stay, as well as advice and support to non-specialist healthcare professionals at acute hospital sies and in the community, is delivered by Secondary Care services across CTMUHB. This care is primarily provided by three separate diabetes Multidisciplinary Teams (MDTs) within each local authority area, with care delivery centred around the three District General Hospitals (DGHs) Prince Charles Hospital (PCH), Princess of Wales (POW) and Royal Glamorgan Hospital (RGH).These three diabetes MDTs have different staffing ratios of consultant diabetologists, diabetes specialist nurses, healthcare support workers, podiatrists and specialist diabetes dietitians.

Prevention and management of diabetes complications is also delivered by consultant microbiologists, ophthalmologists, radiologists and trauma and orthopaedic surgeons across the three DGHs in CTMUHB, and by renal physicians and vascular surgeons based at University Hospital of Wales (UHW). It is expected that specialist services implement NICE guidelines in addition to other national/international guidelines as outlined in appendix 3, but there is a need to review current diabetes pathways and policies across the three DGHs to ensure that diabetes care is high quality and evidence-based, and is delivered equitably across CTMUHB.

The care of children and young people (CYP) with T1DM and T2DM across CTMUHB is provided by one multidisciplinary diabetes specialist team. This MDT implements evidence-based national and international guidelines as outlined in appendix 2. Uptake of care processes for children and young people is higher and shows much less variation across the health board than seen in adults – see appendix 3 for more details. Operating as one CYP diabetes MDT means that policies and procedures are implemented across the whole of CTMUHB resulting in less variation in care provision than that demonstrated in adult diabetes services.

However, there is insufficient administrative resource within the CYP diabetes service to meet procurement demands, MDT coordination requirements, support for collation and analysis of NPDA data, clinic management, and support for ongoing quality and service improvement across CTMUHB.

Further work needs to be undertaken to review staff resources and the current service delivery model for CYP diabetes services in CTMUHB.

4.6 SUMMARY OF IDENTIFIED GAPS

A gap analysis comparing current provision in CTMUHB with national requirements and gold standard guidelines has been completed and has identified the following key gaps in service provision.

4.6.1 DIABETES PREVENTION

- Inadequate provision of adult weight management services; no paediatric weight management service[a]
- Lack of comprehensive diabetes case finding approach
- Diabetes prevention programme only implemented in 2 clusters in CTMUHB; funding only available until March 2026, no confirmed funding for AWDPP from April 2026. Pan health board role out 25-26 planned but again with fixed term funding until 26. Sustainable funding required.
- No diabetes remission service; Value-Based Health Care funding secured until March 27, sustainable funding required.

4.6.2 DIABETES EDUCATION

- Low uptake of adult structured education services in CTMUHB
- Low uptake of SEREN Connect; uncertain future funding of SEREN programmes
- Pre-conception advice not routinely covered in SEREN Connect
- No DAFNE structured education course provision for adults with T1DM at POW

4.6.3 DIABETES CARE

- Low uptake of all 8 essential care processes in adults
- Low coverage of diabetes eye screening
- No funding for a designated CTMUHB inpatient podiatry service post March 2027
- No CTMUHB inpatient diabetes pathway – currently in development
- No self-referral pathway to primary/secondary care podiatry services
- Staffing capacity is insufficient for current paediatric diabetes caseload; inequitable transition service due to insufficient adult staffing
- Diabetes speciality nursing and dietetic capacity insufficient across CTMUHB
- No adult diabetes psychology service; insufficient paediatric psychology service (no psychology for 18–25-year-olds)
- No CTMUHB implemented pathways for T1DM, T2DM or GDM
- Inequitable pre-conception service provision across CTMUHB
- National GDM pathway does not include the requirements for annual follow up

[a]Weight management services are beyond the scope of this strategic plan. T2DM prevention includes weight management, however this sits within the Healthy Weight Road Map for CTMUHB.

4.6.4 EQUITY AND ENGAGEMENT

- No routine data to assess equity of diabetes prevention and management services
- No support groups for adults located in Bridgend or Merthyr
- No comprehensive approach to patient engagement re diabetes services in CTMUHB

A summary of the gap analysis is outlined in appendix 3 and 4.

5. WHAT WE WANT TO ACHIEVE IN CTM

Our organisational strategy CTM2030: Our Health, Our Future has four strategic goals:

- Creating Health
- Improving Care
- Inspiring People
- Sustaining our Future

The diabetes programme of work in CTMUHB cuts across all four strategic goals and this strategic plan seeks to embed the overarching CTM2030 vision and priorities within the diabetes programme.

5.1 CTMUHB VISION FOR DIABETES

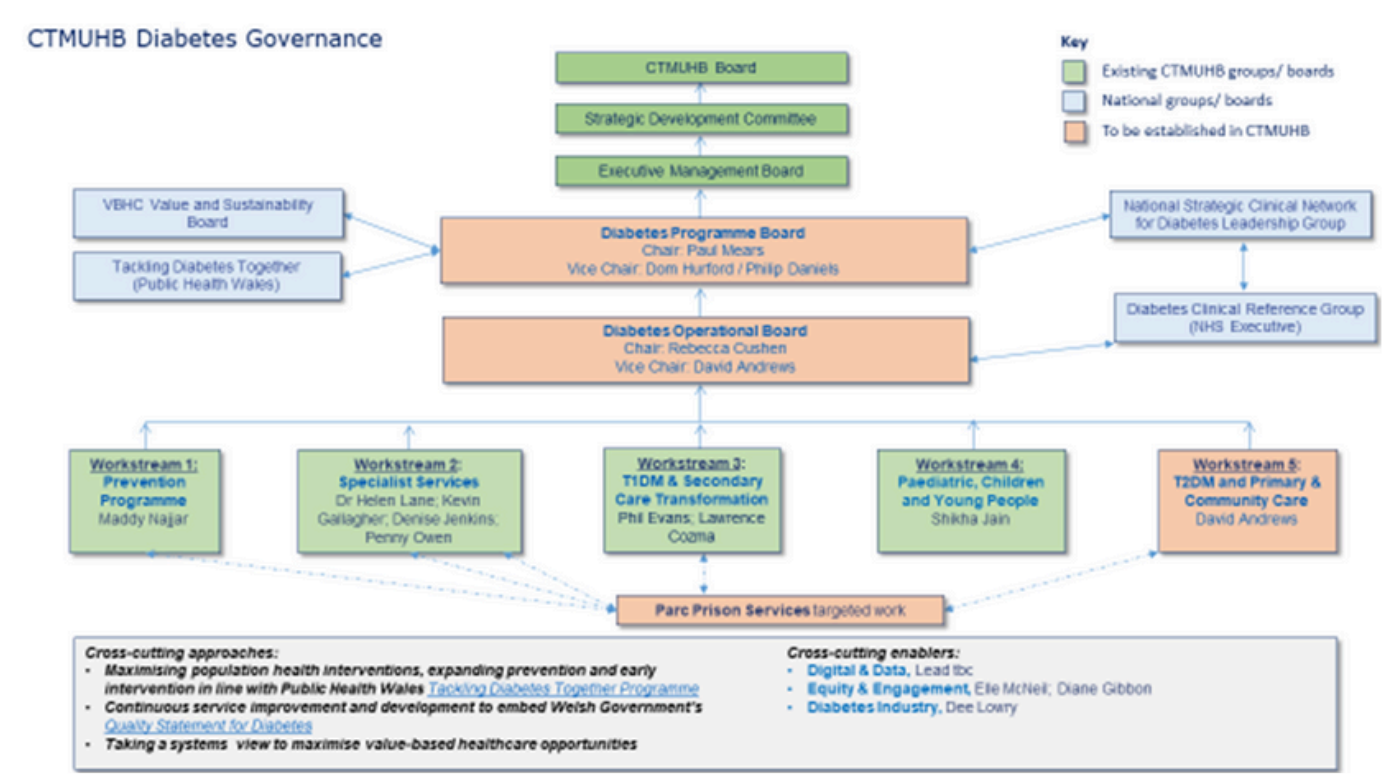
The diabetes programme in CTMUHB has three strategic objectives:

1. Prevent or delay the onset of T2DM in those with modifiable risk factors
2. Prevent poor outcomes through effective diabetes care
3. Ensure equitable provision of all aspects of the diabetes pathway in CTMUHB

5.2 DIABETES GOVERNANCE IN CTM UHB

A Strategic Diabetes Programme Board has been established to provide strategic oversight, guidance and challenge. It will ensure alignment of the workstreams responsible for delivery of this 5- year strategic plan with governance as outlined below:

Figure 5: CTMUHB Diabetes Programme Governance Structure



5.3 OUR DIABETES PRIORITIES

The overarching priorities for years 1-3 are:

1. Review all diabetes services across CTMUHB to ensure services are high quality, evidence-based, equitable and meet the Welsh Government Quality Statement for diabetes and NICE guidelines.
2. To deliver service innovation that improves patient outcomes and diabetes management through harnessing new and emerging technologies and modernising diabetes services.
3. To develop, deliver and evaluate diabetes prevention and remission services in CTMUHB, ensuring core funding is secured from 2026 onwards.
4. To strengthen co-production and engagement with people living with diabetes across our communities.
5. To develop a diabetes data dashboard that supports implementation planning and monitoring and meets Welsh Government reporting requirements.

These priorities and the individual workstream priorities will be supported, guided and monitored via the Operational and Strategic Programme Boards. During Quarter 3 of year 2, all workstreams and the boards will review progress made towards achieving these priorities in order to set priorities for year 3-5. This will enable the diabetes programme to move flexibly, responding to new priorities and developments, inclusive of technological advancements in the management of diabetes. Workstream priorities are outlined in appendix 5 and have been developed with workstream leads following the gap analysis.

6 NEXT STEPS

6.1 OPERATIONAL PLANS

Workstream leads will develop annual plans outlining key deliverables and metrics mapped against the strategic plan's priorities. The Diabetes Operational Board will be responsible for collating the overarching plan and reviewing implementation via quarterly progress reports.

6.2 STRATEGIC PLAN UPDATES

Future publication of new or updated national guidance, policies or Welsh Government mandates relating to diabetes may require this strategic plan to be updated within the next 5 years. Any update to this strategic plan will need to be agreed by the CTMUHB Diabetes Operational Board and formally signed off by the CTMUHB Strategic Diabetes Programme Board. During Quarter 3 of year 2, all workstreams and the boards will review the priorities and progress made towards achieving these in order to set priorities for year 3-5.

7 REFERENCES

1. Public Health Wales. Tackling Diabetes Together Programme. Programme Initiation Document version 1.5. 2024 [accessed 17th April 2025]. Available from: TDTP PID (002).pdf.
2. NHS Wales Executive. Pathways and guidelines [accessed 17th April 2025]. Available at: Pathways and guidelines - NHS Wales Executive
3. National Institute for Health and Care Excellence. Type 1 diabetes in adults: diagnosis and management. NICE guideline NG17. 2015 [accessed 17th April 2025]. Available from: Overview | Type 1 diabetes in adults: diagnosis and management | Guidance | NICE
4. National Institute for Health and Care Excellence. Type 1 diabetes in adults. Quality standard QS208 2023 [accessed 17th April 2025]. Available from: Overview | Type 1 diabetes in adults | Quality standards | NICE
5. National Institute for Health and Care Excellence. Type 2 diabetes in adults: management. NICE guideline NG28. 2015 [accessed 17th April 2025]. Available from: Overview | Type 2 diabetes in adults: management | Guidance | NICE
6. National Institute for Health and Care Excellence. Type 2 diabetes in adults. Quality standard QS209. 2023 [accessed 17th April 2025]. Available from: Quality statements | Type 2 diabetes in adults | Quality standards | NICE
7. National Institute for Health and Care Excellence. Diabetes (type 1 and type 2) in children and young people: diagnosis and management. NICE guidelines NG18. 2015 [accessed 17th April 2025]. Available from: Overview | Diabetes (type 1 and type 2) in children and young people: diagnosis and management | Guidance | NICE
8. National Institute for Health and Care Excellence. Diabetes in children and young people. Quality standard QS125. 2016 [accessed 17th April 2025]. Available from: Overview | Diabetes in children and young people | Quality standards | NICE
9. National Institute for Health and Care Excellence. Diabetes in pregnancy: management from preconception to the postnatal period. NICE guideline NG3. 2015 [accessed 17th April 2025]. Available from: Overview | Diabetes in pregnancy: management from preconception to the postnatal period | Guidance | NICE
10. National Institute for Health and Care Excellence. Diabetes in pregnancy. Quality standard QS109. 2016 [accessed 17th April 2025]. Available from: Overview | Diabetes in pregnancy | Quality standards | NICE
11. National Institute for Health and Care Excellence. Type 2 diabetes: prevention in people at high risk. Public health guideline PH38. 2012 [accessed 17th April 2025]. Available from: Overview | Type 2 diabetes: prevention in people at high risk | Guidance | NICE
12. National Institute for Health and Care Excellence. Type 2 diabetes prevention: population and community-level interventions. Public health guidelines PH35 [accessed 17th April 2025]. Available from: Overview | Type 2 diabetes prevention: population and community-level interventions | Guidance | NICE
13. National Institute for Health and Care Excellence. Hypertension in adults: diagnosis and management. NICE guideline NG136. 2019 [accessed 17th April 2025]. Available from: Overview | Hypertension in adults: diagnosis and management | Guidance | NICE
14. National Institute for Health and Care Excellence. Cardiovascular disease: risk assessment and reduction, including lipid modification. NICE guideline NG 238 [accessed 17th April 2025]. Available from: Overview | Cardiovascular disease: risk assessment and reduction, including lipid modification | Guidance | NICE

REFERENCES

15. Public Health Wales. Diabetes prevalence – trends, risk factors, and 10-year projection 2023 [accessed 15th October 2024]. Available from: Diabetes prevalence – trends, risk factors, and 10-year projection - Public Health Wales (nhs.wales)

16. Diabetes UK 2022. 50% more children being treated for type 2 diabetes. [Accessed on 15th October 2024] Available from: https://www.diabetes.org.uk/about-us/news-and-views/more-children-with-type-2-diabetes

17. Royal College of Paediatrics and Child Health. National Paediatric Diabetes Audit (NPDA) spotlight audit reports [accessed 15th October 2024]. Available from: National Paediatric Diabetes Audit (NPDA) spotlight audit reports (rcpch.ac.uk)

18. LifeStyle Medical Centers. Diabetes. The Facts about Pre-Diabetes. 2024 [accessed 15th October 2024]. Available from: The Facts About Pre-Diabetes | Lifestyle Medical Centers

19. Public Health Wales 2023 National Survey for Wales; Public Health Outcomes Framework for Wales reporting tool, Working age adults of healthy weight, age-specific average, persons aged 16-64, Health Board, 2022/2023 [accessed 15th October 2024]. Available from: PHOF Reporting Tool (shinyapps.io) (was 19)

20. Welsh Government. Stats Wales. Adult lifestyles by local authority and health board, 2020-21 onwards. 2023 [accessed 17th April 2025. Available from: Adult lifestyles by local authority and health board, 2020-21 onwards

21. Public Health Wales. Diabetes deep dives key slides for CTMUHB. 2024.

22. Welsh Government. Health Weight: Health Wales. All Wales Weight Management Pathway 2021 accessed 17th April 2025]. Available from: all-wales-weight-management-pathway-2021.pdf

23. National Institute for Health and Care Excellence. Hybrid closed loop systems for managing blood glucose levels in type 1 diabetes. Technology appraisal guidance TA943. 2023 [accessed 17th April 2025]. Available from: Overview | Hybrid closed loop systems for managing blood glucose levels in type 1 diabetes| Guidance | NICE

24. National Strategic Diabetes Network 5 Year Plan [accessed 17th April 2025]. Available from: NDSN 5 year plan.docx

25. Diabetes UK. All-Wales Diabetes Review. Cross Party Group on Diabetes 2023 [accessed 17th April 2025]. Available from: All Wales Review ENG.pdf

26. NHS England. Core National Diabetes Audit [accessed 17th April 2025]. Available from: Core National Diabetes Audit - NHS England Digital

27. National Institute for Health and Care Excellence. Diabetic foot problems: prevention and management. NICE guidelines NG19. 2015 [accessed 17th April 2-25]. Available from: Overview | Diabetic foot problems: prevention and management | Guidance | NICE

28. NHS Wales Executive. Type 1 Diabetes Pathway [accessed 17th April 2025]. Available from: executive.nhs.wales/functions/networks-and-planning/diabetes/hub-for-diabetes-healthcare-professionals/pathways-and-guidelines/pathway-docs/type-1-diabetes-pathway/

29. National Institute for Health and Care Excellence. Transition from children's to adults' services for young people using health or social services. NICE guidelines NG43. 2016 [accessed 17th April 2025]. Available from: Overview | Transition from children's to adults' services for young people using health or social care services | Guidance | NICE

30. Davies, M. J., Aroda, V. R., Collins, B. S., Gabbay, R. A., Green, J., Maruther, N. M. et al. Management of Hyperglycaemia in Type 2 Diabetes, 2022. A Consensus Report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). Diabetes Care 2022; 45(11): 2753–2786. [accessed 17th April 2024]. Available from: Management of Hyperglycemia in Type 2 Diabetes, 2022. A Consensus Report by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD) | Diabetes Care | American Diabetes Association

REFERENCES

31. Association of Children's Diabetes Clinicians. Clinical guideline. A Practical Approach to Management of Type 2 diabetes in Children and Young People (CYP) under 18 years [accessed 17th April 2025]. Available from: TYpe-2-guideline-ACDC-format-publish.pdf

32. NHS England. National Diabetes Footcare Audit [accessed 17th April 2025]. Available from: National Diabetes Foot Care Audit - NHS England Digital

33. NHS England. National Pregnancy in Diabetes Audit [accessed 17th April 2025]. Available from: National Pregnancy in Diabetes Audit - NHS England Digital

34. NHS England. National Diabetes Inpatient Safety Audit [accessed 17th April 2025]. Available from: National Diabetes Inpatient Safety Audit - NHS England Digital

35. NHS England. National Diabetes Audit – Integrated Specialist Survey (NDA ISS) [accessed 17th April 2025]. Available from: National Diabetes Audit – Integrated Specialist Survey (NDA ISS) - NHS England Digital

36. Public Health Wales. Diabetic Eye Screening Wales Annual Statistical Report 2022-23. 2024 [accessed 17th April 2025]. Available from: A4 Branded Word

37. Royal College of Psychiatrists. Medical emergencies in eating disorders (MEED). Guidance on recognition and management 2022 [accessed 17th April 2025]. Available from: Medical emergencies in eating disorders (MEED) - Guidance on recognition and management - CR233

38. British Society for Paediatric Endocrinology and Diabetes (BSPED). BSPED DKA Guidelines 2024 [accessed 17th April 2025]. Available from: BSPED DKA Guidelines | BSPED

39. Annan, S. F., Higgins, L. A., Jelleryd, E., Hannon, T., Rose, S., Salis, S. et al. ISPAD Clinical Practice Consensus Guidelines 2022: Nutritional management in children and adolescents with diabetes. Pediatric Diabetes 2022 [accessed 17th April 2025]. Available from: ISPAD Clinical Practice Consensus Guidelines 2022: Nutritional management in children and adolescents with diabetes - Annan - 2022 - Pediatric Diabetes - Wiley Online Library

40. NHS England. National Pregnancy in Diabetes Audit Dashboard 2021 to 2023. 2024 [accessed 17th April 2025]. Available from: Microsoft Power BI

8 GLOSSARY OF TERMS AND ABBREVIATIONS

Abbreviation / Acronym	Descriptor/ Full name
ACR	Albumin Creatinine Ratio
AWDPP	All-Wales Diabetes Prevention Programme
CGM	Continuous Glucose Monitoring
CSI	Continuous Service Improvement
CTMUHB	Cwm Taf Morgannwg University Health Board
CV	Cardiovascular
CVA	Cerebrovascular Accident /'Stroke'
CYP	Children and Young People
DESW	Diabetic Eye Screening Wales
DIVA	Diabetes Insight & Variation Atlas
DKA	Diabetic Ketoacidosis
GDM	Gestational diabetes
HCL	Hybrid Closed loop
LoS	Length of Stay
MDT	Multidisciplinary Team
MI	Myocardial infarction/'Heart attack'
NDA	National Diabetes Audit
NDFA	National Diabetes Footcare Audit
NDISA	National Diabetes Inpatient Safety Audit
NICE	National Institute for Health and Care Excellence
NPDA	National Paediatric Diabetes Audit
NPID	National Pregnancy In Diabetes Audit
PCH	Prince Charles Hospital
PCIP	Primary Care Information Portal
PHW	Public Health Wales
POW	Princess of Wales
PREM	Patient Reported Experience Measure
PROM	Patient Reported Outcomes Measure
RGH	Royal Glamorgan Hospital
T1DM	Type 1 diabetes mellitus
T2DM	Type 2 diabetes mellitus
TDTP	Tackling Diabetes Together Programme
TIA	Transient Ischaemic Attack/'Mini stroke'
UHW	University Hospital of Wales
WG	Welsh Government
WHSCC	Welsh Health Specialised Committee
WISE	Wellness Improvement Service
YCC	Ysbyty Cwm Cynon
YCR	Ysbyty Cwm Rhondda