Optimising Diabetes Management

CGM: A Pathway to Personalised Care in Asia Pacific

Prepared by vista health

In collaboration with Diabetes in Asia Study Group DASG

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INTRODUCTION

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FOREWORD

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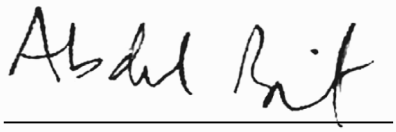
The Asia Pacific region is at the epicentre of the global diabetes epidemic, accounting for more than half of individuals living with diabetes worldwide. Moreover, several countries in the region (e.g, China, India, Pakistan) rank among the top 10 territories with the highest number of people with diabetes in 2024. As diabetes prevalence surges across APAC, the clinical and societal burden is growing rapidly, touching patients, families, and overstretched health systems alike, with the impact particularly severe in countries with limited resources.

Diabetes is a debilitating health condition, where millions confront the daily challenge of managing their condition without access to adequate monitoring tools, leading to suboptimal glycemic control and a higher risk of both acute and chronic complications. CGM offers a clinically proven, transformative solution that enables real-time tracking, improves safety, and supports tighter glycemic control. However, it remains financially out of reach for most patients in resource-constrained settings.

At the Diabetes in Asia Study Group (DASG), we are committed to working with fellow stakeholders to address affordability challenges, initiate and expand reimbursement for CGM in underserved settings. By doing so, we can elevate standards of care, reduce complications, and build more equitable health systems. This White Paper provides a roadmap toward that shared vision, and we stand ready to collaborate to make it a reality.



FOREWORD *(Continued)*

Prof. Taninee Sahakitrungruang
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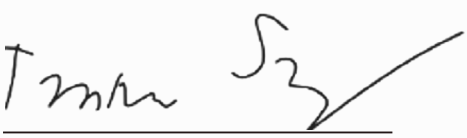
The prevalence of diabetes is rising rapidly across Thailand and the Asia Pacific region, creating a substantial burden on health systems, patients, and families who face the daily challenges of self-monitoring. Good glucose monitoring is central to effective diabetes care, and Thailand has made notable progress through national registries, structured diabetes self-management education (DSME) programs, and the introduction of reimbursement schemes.

Preliminary research from Thailand demonstrates the benefits of continuous glucose monitoring (CGM) under the Universal Healthcare Coverage (UHC) program. Among patients with type 1 diabetes (T1D), CGM use led to modest HbA1c reductions (-0.29%) and a meaningful increase in patients achieving Time-in-Range ≥70% (from 47% to 69% at 12 months). Even greater improvements were observed with Hybrid Closed-Loop systems, which reduced HbA1c by nearly 1% overall and more than 1.2% in children and adolescents. Despite these encouraging outcomes, CGM uptake remains limited—only 12% of patients adopted CGM in the first year of reimbursement—underscoring the need for expanded access, streamlined processes, and stronger reimbursement support.

By embedding CGM into health benefit packages, patients and providers alike gain tools to improve glycemic control, prevent acute events, and support continuity of care across all life stages, including the critical transition from adolescence to adulthood. Yet, access remains largely confined to people with T1D, while many with type 2 diabetes continue to face barriers. This gap highlights the urgent need for joint action. Policymakers, clinicians, patient advocates, and industry partners must work together to ensure that CGM and related technologies are accessible, affordable, and embedded as a standard of care.

Placing effective monitoring at the heart of diabetes management is essential not only to improving outcomes, but also to reducing inequities and strengthening health systems across the region. This white paper offers a roadmap to advance these goals. With collective commitment and evidence-informed policies, we can move closer to equitable access for all people living with diabetes.



FOREWORD *(Continued)*

Ms Joanna Hotung
Chairperson Emeritus, Youth Diabetes Action (YDA), Hong Kong

The diabetes burden in the Asia Pacific region continues to rise, placing a heavy toll on individuals, families, and healthcare systems. Since 2001, we at Youth Diabetes Action have been experiencing how young people and their families work relentlessly to manage diabetes, a 24/7 responsibility to balance food, insulin, and exercise. Families carry the emotional and financial weight of this vigilance, while children and teenagers struggle with the added challenges of finger-prick tests that are painful and difficult to manage alongside school and social life.

As the mother of a child diagnosed with Type 1 diabetes at the age of seven and now an adult looking forward to starting her own family, I have shared the never-ending ups and downs not only of blood sugars but also the physical and emotional toll these can take on the individual and their family. Access to education, ongoing support, and new technologies to transform quality of life have been critical in the journey to preserve health and ensure a life as close to normal as possible. Continuous glucose monitoring (CGM) continues to offer an unobtrusive, convenient, and accurate solution to track glucose levels in real-time, empowering individuals with diabetes, whether Type 1 or Type 2, to manage their condition more effectively and with greater peace of mind. For us, and for all the other families struggling to live with Type 1 or Type 2 diabetes, it has been life-changing and life-saving.

Despite the clear benefits, access to CGM remains challenging across APAC, even in relatively advanced healthcare systems including Hong Kong. At present, some families continue to pay fully out-of-pocket for CGM devices, creating inequities in access and outcomes to this life-changing technology. This financial burden is not sustainable in the long run, as many families struggle to afford this vital resource, which may ultimately affect their children's long-term health and well-being. We therefore urge policymakers, clinicians, industry, and patient advocates to work together to establish sustainable reimbursement mechanisms for CGM.

We are hopeful that this White Paper will serve as a catalyst for action, paving the way toward policies that deliver lasting benefits for all people living with diabetes in the Asia Pacific region.

EXECUTIVE SUMMARY

Diabetes is a rapidly growing public health challenge across the Asia Pacific (APAC) region, now home to nearly half of the world's diabetes population. In 2024, an estimated 589 million adults globally were living with diabetes, with over half residing in APAC[1]. This disproportionate burden is expected to grow, significantly straining healthcare systems, increasing costs, and affecting the quality of life for millions.

589 million
adults were diagnosed with diabetes in 2024 globally

Poorly controlled diabetes leads to severe complications such as:[2]

- **Cardiovascular disease**
- **Kidney failure**
- **Amputations**
- **Reducing life expectancy**
- **Blindness**
- **Increasing healthcare costs through frequent hospitalisations and long-term care**

Continuous Glucose Monitoring (CGM) offers an effective solution by providing real-time glucose data that enables more precise management, supports better glycaemic control, and improves quality of life[3]. However, its access remains limited in many APAC territories, reimbursement barriers and affordability challenges for those paying out of pocket[4]. While several territories have made progress, much work remains to strengthen policies, expand coverage, and support more equitable access.

Case studies across APAC and beyond highlight both encouraging progress and persistent barriers. Several territories now reimburse CGM for priority groups, such as individuals with Type 1 Diabetes (T1D) or gestational diabetes, supported by clinical guidelines and national strategies. At the same time, broader reimbursement, particularly for people with Type 2 Diabetes (T2D) on intensive insulin therapy, often remains limited despite CGM's proven benefits. Challenges such as budget constraints, lack of local data, and system readiness continue to delay adoption.

To advance CGM reimbursement, this paper outlines several key recommendations:

By implementing these actions, APAC countries can make meaningful progress towards optimising diabetes care, improving outcomes, and reducing the long-term burden of complications and healthcare costs. CGM can and should be a cornerstone of modern diabetes management across the region.

INTRODUCTION

Diabetes represents a significant and rapidly growing public health crisis across the globe, with the Asia Pacific (APAC) region bearing a disproportionate burden. The International Diabetes Federation (IDF) estimated that 589 million adults were living with diabetes in 2024, over half of whom reside in South-East Asia (SEA) and the Western Pacific (WP)[1]. This results in substantial clinical, economic, and humanistic disease burdens that place immense pressure on healthcare systems, governments, and affected populations.

Clinically, diabetes is associated with a range of severe complications, including cardiovascular disease, kidney failure, and amputations, all of which lead to significant disability and premature mortality[5]. Achieving glycemic control is critical to prevent organ damage and diabetes complications. However, people with insulin-treated diabetes still face challenges due to a lack of optimal glucose monitoring regimens, and those with poorer glycemic control continue to face elevated risks of microvascular and macrovascular complications[6,7].

In addition to the clinical burden, there is also a profound economic impact of diabetes. The APAC region is projected to become the leading contributor to the global economic burden of diabetes by 2030, with an **estimated cost of USD ~796 billion**, primarily driven by poorly managed cases and related complications[4].

Yet, despite the growing attention to diabetes management and prevention through national programs such as Singapore's Healthier SG and India's National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)[8,9], gaps persist in diabetes management.

Beyond the clinical impact, diabetes imposes a heavy humanistic burden[4]. Stanford researchers have shown that people with diabetes (PwD) need to make about 180 therapy decisions per day[10]. Yet, most spend at most four hours with a healthcare professional a year and are left to self-manage their healthcare decisions the rest of the time on a daily basis[11]. PwD often experience distress from constant monitoring, fear of hypoglycemia, and a reduced quality of life, particularly when managing the complexities of diabetes care daily[12]. Caregivers, particularly parents of children with T1D, also endure significant stress and disruption to their lives[13].

Innovations like Continuous Glucose Monitoring Sensors (CGM) have shown to make a difference to reduce these impacts. CGM represent a critical advancement in glucose monitoring, providing people with diabetes with real-time data and eliminating the need for frequent and manual fingerstick testing[4,14,15]. By delivering continuous, dynamic glucose data, CGM can significantly optimise the precision of diabetes management to improve health and quality of life in PwD, ultimately supporting healthcare system efficiencies and economic outcomes[3].

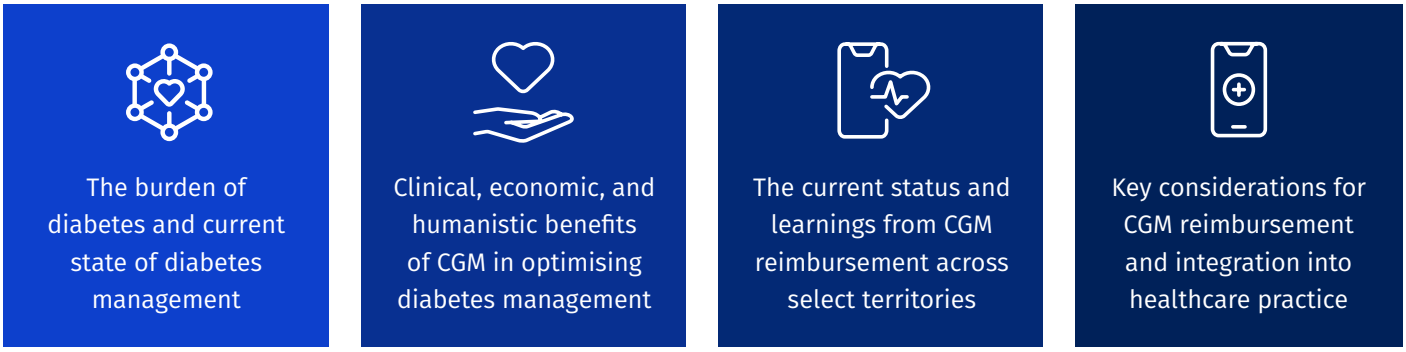
METHODOLOGY

This white paper assesses the diabetes management landscape across selected APAC territories to provide recommendations for advancing CGM access through reimbursement and adoption to optimise diabetes management.

The chosen territories were selected to reflect the full spectrum of healthcare system maturities and funding approaches across the region.

To assess the current landscape and make recommendations, targeted literature review was conducted, covering a wide range of sources, including journal publications, reports, and case studies on diabetes management and CGM integration. Discussions with local experts in the field of diabetes management, CGM, and reimbursement policies were conducted to supplement research. These included clinical experts, payers, and diabetes advocates to ensure a 360-degree view encompassing clinical, lived experience, and policymaker/payer perspectives.

Insights were organized into four primary themes:



To facilitate learnings across territories, three archetypes were identified based on the comprehensiveness of diabetes management using a scorecard of key diabetes management indicators ***(see Appendix section in Page 47)***. Tailored recommendations were provided for archetypes where more can be done to optimise diabetes management through reimbursement and increased adoption of CGM. Additionally, the recommendations incorporate global learnings where diabetes health and reimbursement policies incorporating CGM have proven effective in improving diabetes management.

THE SUBSTANTIAL PUBLIC HEALTH BURDEN OF DIABETES

Diabetes is a complex, multifaceted challenge with far-reaching effects on individuals, families, and healthcare systems in the APAC region. Understanding the depth of this burden requires examining the prevalence, clinical complications, economic costs, and humanistic impact of diabetes.

Rising diabetes prevalence – a growing crisis in APAC

According to the IDF, one in ten adults in Southeast Asia (SEA) and one in eight adults in the Western Pacific region were living with diabetes in 2024[4]. ***Table 1 (Page 15)*** details the number of PwD and age-standardised prevalence of diabetes across in scope territories.

The prevalence is also expected to increase significantly by 2045 with projections showing[4]:

- **68% increment in South East Asia**
- **26% increment in Western Pacific**

This highlights the growing diabetes challenge in the region, with the number of PwD expected to rise rapidly, further straining healthcare systems and resources.

Diabetes is associated with high clinical and economic burden, significantly affecting quality of life (QoL)

Significant mortality is associated with diabetes across APAC, where it accounts for an average of 14% of total mortality in the region ***(Table 1 in Page 15)***, underscoring the severity of the disease. It increases the risk of complications such as cardiovascular disease, kidney damage, blindness, and amputations, leading to significant disability and reduced quality of life[5]. Emerging complications, including cancer, liver disease, mental health issues, and infections, are also linked to diabetes[5].

Despite advances in therapies and technologies, adoption of modern diabetes care has been slow, especially in low- and middle-income countries with limited healthcare resources[5]. While insulin and glucose-lowering therapies support glycaemic control, effective diabetes management also requires consistent monitoring to prevent side effects like hypoglycaemia[16]. On top of access to insulin, the WHO has emphasised the importance of blood glucose self-monitoring, including access and affordability of these technologies as one of the key targets and indicators of diabetes control[17].

In the Southeast Asian cohort of the International Operations Hypoglycaemia Assessment Tool (IO HAT) study, nearly all people with diabetes reported experiencing hypoglycemia (100% of people living with T1D; 97.3% of people living with T2D)[18].

These events can cause distressing symptoms such as trembling, hunger, and difficulty concentrating, causing people living with diabetes and caregivers to be overly cautious in managing diabetes[16].

Severe cases can also result in confusion, seizures, or unconsciousness, with the fear of hypoglycemia discouraging insulin use and reducing people's ability to follow treatment plans[16].

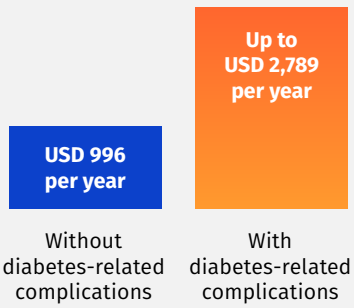
HbA1c is and remains a key marker for assessing glycemic control in PwD, as endorsed by leading clinical guidelines such as the American Diabetes Association[19]. However, there are limitations with the test as it does not offer insights into factors such as glycemic variability, frequency of hyperglycemic or hypoglycemic episodes, or other information needed for making adjustments to antidiabetic medications[20]. HbA1c can also be inaccurate in people with anemia, hemoglobinopathies, kidney or liver disease[17]. Such limitations are increasingly addressed through self-monitoring of blood glucose (SMBG) and, more recently, continuous glucose monitors (CGM)[14], which offer real-time data and insights into glycemic trends.

Economic burden

Improper glycemic control results in significant financial costs on individuals and healthcare systems.

Thailand[21]

A study found that PwD living with diabetes-related complications faced higher costs



Malaysia[22]

Hypoglycemia-related care alone costs an estimated

RM 117.4 Million
(USD 30 Million)

accounting for 0.5% of the Ministry of Health's budget

China[23]

In contrast, a simulation study in China found that achieving glycaemic targets (HbA1c <6.5%) in 80% of the population could reduce

- **Premature mortality by 2.3%**
- **Direct medical costs by 9.1%**

over 10 years

However, medical costs may only represent 42% of the total cost of diabetes, with the rest comprising substantial indirect costs from productivity losses and lifestyle changes[24]. PwD in Singapore report having to take unpaid leave or leaving jobs due to complications, while also facing high costs for healthy food and insurance[25].

Despite APAC being predicted to become the largest contributor to the economic burden of diabetes, SEA and the WP have some of the lowest diabetes-related health expenditure per PwD. Despite similar diabetes prevalence, North America spends up to 70 times more per PwD than SEA[4]. Although SEA accounted for 18.2% of PwD worldwide in 2024, only 1% (USD 12 billion) of the total worldwide diabetes spending was spent in the region[26]. Investment in diabetes management across APAC must increase to keep pace with the region's growing diabetes burden.

Humanistic burden

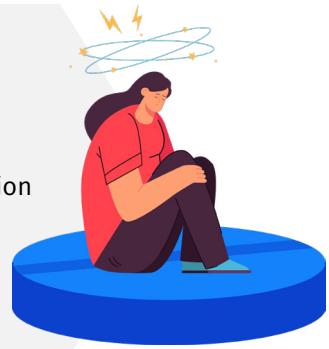
Across the APAC territories, diabetes imposes a significant burden, averaging 1,120 DALYs per 100,000 population ***(Table 1 in Page 15)***. The clinical and financial burden of diabetes culminates in a severe impact on both people living with diabetes' and caregivers' quality of life.

The chronic nature of the disease requires constant attention to[12]:

- Glucose levels
- Diet
- Activity
- Medication

Often leading to

- Psychological fatigue
- Reduced life satisfaction
- Social limitations



Fear of hypoglycemia, particularly during nocturnal episodes, is especially distressing and can cause significant anxiety and behavioural changes[27]. For caregivers, especially parents of children with T1D, fear of nighttime hypoglycemia leads to frequent sleep disruptions, constant monitoring, and chronic stress[13].

To prevent hypoglycemic events, PwD may underdose insulin or limit physical activity, compromising diabetes control[27]. A study in Singapore also showed that improper glycemic control is consistently associated with diabetes-related distress and poorer health-related quality of life[28]. These factors underscore the urgent need for stronger intervention to ease the personal toll of diabetes.

Table 1: Diabetes prevalence and burden across the APAC region[29,30]

Indicators	Singapore	Malaysia	Japan	South Korea	Taiwan	Thailand	New Zealand	Australia	Vietnam	Indonesia	The Philippines	Hong Kong	India	Pakistan
Diabetes estimates (20-79 y) (2024)														
People with diabetes, in 1,000s	699	4754	10764	131	2246	6361	292	1694	2500	20426	4726	260	89827	34532
Age-standardised prevalence of diabetes, %	11.40%	21.10%	8.10%	9.60%	19.00%	10.20%	10.20%	7.40%	3.40%	11.30%	7.50%	8.20%	10.50%	31.40%
People with undiagnosed diabetes, in 1,000s	261	2395	3372	1426	587	2118	75	474	945	14950	2526	383	38599	9282
Proportion of people with undiagnosed diabetes, %	37.30%	50.40%	31.30%	28.30%	26.10%	33.30%	25.70%	28.00%	37.80%	73.20%	53.50%	54.20%	43.00%	26.90%
Mortality attributable to diabetes (20-79 y) (2014)														
Deaths attributable to diabetes	4013	21796	84288	33205	13677	34753	1965	8295	7563	131644	35310	4552	334922	226752
Proportion of diabetes-related deaths, %	26.20%	16.10%	18.10%	19.60%	16.90%	8.50%	11.30%	11.30%	1.80%	8.40%	6.30%	19.00%	5.00%	24.80%
Type 1 diabetes estimates (2024)														
People with type 1 diabetes (all age groups), in 1,000s	4	10	79	33	27	21	22	115	23	12	30	4	941	24
Prevalence of type 1 diabetes, %	0.07%	0.03%	0.07%	0.07%	0.11%	0.03%	0.43%	0.45%	0.02%	0.00%	0.03%	0.06%	0.07%	0.01%
Hyperglycaemia in pregnancy (HIP) (20-49 y) (2024)														
Live births affected by HIP	11377.5	160407.9	43121.2	55387.8	20923.7	155434.3	--	52131.8	274091.2	--	--	7674.4	6272667.4	--
Prevalence of gestational diabetes mellitus (GDM), %	27.10%	27.30%	5.30%	21.00%	2.50%	26.50%	12.30%	10.80%	21.00%	26.10%	2.00%	19.30%	26.10%	2.00%
Live births affected by other types of diabetes first detected in pregnancy	313	21165	1125	1431	1221	6417	--	1773	4537	--	--	181	217165	--
Live births affected by other types of diabetes detected prior to pregnancy	526	20847	2466	3618	1031	12858	--	4560	7466	--	--	153	288223	--
Diabetes-related health expenditure (2024)														
Total diabetes-related health expenditure, USD million	1769.6	4833.5	35648.5	8971.2	--	3973.5	1235.9	8867.1	1670	6302.4	1940.3	--	8485.8	2639.9
Total diabetes-related health expenditure, % of GDP	0.33%	1.10%	0.88%	0.48%	--	0.75%	0.45%	0.49%	0.36%	0.45%	0.41%	--	0.22%	0.70%
Diabetes-related health expenditure per person, USD	2486.1	1090.7	3239.3	2554.6	--	655	4232.3	5944	418.1	323.8	450.8	--	114.4	80.1
Overall diabetes burden (2021)														
Disability-Adjusted Life Years (DALYs) due to diabetes (per 100,000 population)	1030	1096	966	979	923	992	--	1613	977	757	754	1644	1733	1091

THE ROLE OF CGM IN OPTIMISING DIABETES MANAGEMENT

Assessment of the diabetes management landscape

Diabetes management across the APAC region is evolving as health systems respond to its growing burden. National initiatives such as Singapore's Healthier SG (launched July 2023) and Pakistan's Prime Minister's Programme for Prevention and Control of Diabetes Mellitus reflect this growing recognition.

Despite such efforts, many territories continue to face challenges in effective diabetes management due to limited resources, uneven technology adoption, and poor access in remote areas[4,31]. Addressing these challenges requires not only strengthening policies but also ensuring equitable access to diabetes management tools like CGM, which can address critical gaps in monitoring and managing glucose levels.

Table 2 ***(Page 18)*** outlines the maturity of diabetes-related policies and systems across APAC, including diabetes-related health expenditure. The categories assessed in the table include primary and secondary prevention policies, CGM inclusion in local guidelines, patient advocacy (advocacy led by people with diabetes or organisations representing the diabetes communities), national diabetes registries, and reimbursement for SMBG and CGM.

Each territory is assessed as follows:

Basic / None:
Basic primary / secondary policies, or no CGM recommendations in locally relevant guidelines, patient advocacy for CGM, national diabetes registry, and reimbursement for SMBG and CGM

Moderate:
Primary / secondary policies that have a broad scope (covering at least 75% of the key elements of a comprehensive primary or secondary policy based on recommendations by the IDF, American Diabetes Association (ADA)'s Standards of Care in Diabetes and APAC consensus recommendations for CGM[4,32,33]), or limited CGM recommendations in locally relevant guidelines, patient advocacy for CGM, national diabetes registry, and reimbursement for SMBG and CGM

Comprehensive:
Comprehensive primary / secondary policies that cover all key elements, and strong CGM recommendations in locally relevant guidelines, patient advocacy for CGM, national diabetes registry, and reimbursement for SMBG and CGM

The assessment of the categories informs the classification of APAC territories into three archetypes – nascent, expanding and established – as outlined in **Table 2 *(Page 18)***. These archetypes are primarily based on the status of CGM reimbursement across APAC to provide insights on how different APAC territories can progress toward more effective diabetes management by optimising CGM reimbursement and adoption.

Nascent territories:
Have not reimbursed CGM, they are further sub-classified into two groups due to the heterogeneity within the archetype:

1. Territories with evolving healthcare coverage and resource-limited public systems
2. Territories with broader healthcare financing and health infrastructure.

Expanding territories:
Have reimbursed CGM for T1D and pregnant women with gestational diabetes on insulin in Taiwan and South Korea.

Established territory:
Have reimbursed CGM for people with Type 1 and 2 diabetes who use insulin at least once a day and only Japan has been classified in this category.

The growing complexity of diabetes care, especially its complications, places mounting pressure on health systems. Higher spending in countries like Malaysia, Thailand, and Pakistan correlates with diabetes prevalence, but these systems remain vulnerable as the IDF projects a steep rise in cases by 2050[1]. Conversely, territories with lower spending may be underinvesting, despite high disease burden.

Given global budget constraints, increasing healthcare spending may be difficult, making it vital to invest more efficiently. Adopting cost-effective technologies like CGM can enhance diabetes management in the near to medium term and help reduce long-term costs from complications, even before primary prevention policies yield results.

Table 2: Assessment of diabetes management landscape and CGM reimbursement in Asia Pacific*

Category / Indicators	Nascent							Expanding						Established
	The Philippines	Vietnam	India	Indonesia	Pakistan	Malaysia	Hong Kong	Thailand	Singapore	New Zealand	Australia	South Korea	Taiwan	Japan
Primary prevention policies / programmes for diabetes (including National NCD/ Diabetes plan)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Secondary prevention policies / programmes for diabetes (including National NCD/ Diabetes plan)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Recommendations of CGM in locally relevant guidelines	○	●	●	○	○	●	●	●	●	●	●	●	●	●
Patient advocacy for CGM	○	○	●	○	●	●	●	●	●	●	●	●	●	●
Diabetes registry	●	○	●	●	●	●	●	●	●	●	●	●	●	●
Reimbursement of SMBG	○	○	○	○	○	○	○	●	●	●	●	●	●	●
Reimbursement of CGMs	○	○	○	○	○	○	○	●	●	●	●	●	●	●
Total diabetes-related health expenditure, USD million	1,940	1,670	8,486	6,302	2,640	4,834	na	3,974	1,770	1,709	8,867	8,971	na	35,649
Total diabetes-related health expenditure, % of GDP	0.4%	0.4%	0.2%	0.4%	0.7%	1.1%	na	0.8%	0.3%	0.7%	0.5%	0.5%	na	0.9%
Diabetes-related health expenditure per person, USD	451	418	114	324	80	1,091	na	655	2,486	1,933	5,944	2,555	na	3,239

Legend ○ Basic (policies) / none (others) ● Moderate ● Comprehensive

*Details on the calculation methodology used for Table 2 are provided in the Appendix

Key role of CGM in optimising diabetes management

SMBG and CGM are both key methods for tracking glucose levels, but they differ significantly in functionality and user experience. Aligned with WHO guidance, SMBG is an essential device and a cornerstone of diabetes management, pivotal in improving glycemic management and enhancing quality of life for all PwD[34]. More recently, CGM represents a critical advancement in glucose monitoring, offering real-time data and reducing the need for frequent fingerstick testing[4,14,15].

Table 3: Key differences between SMBG and CGM[35–39]

	SMBG	CGM
Sample tested	Capillary blood	Interstitial fluid
Sample method	Fingerstick	Sensor inserted under the skin
Frequency of data collection	Determined by the user	Up to every 15 mins with intermittent scanned CGM (isCGM) or continuously with real-time CGM (rtCGM)
Duration of use	**Meter** - unlimited **Lancet and strips** - single use	Sensor can be used up to 15 days
Accuracy	Accurate readings (mean absolute relative difference of 5%), and allows for partial prediction of hypoglycemia through detection of blood glucose fluctuation patterns	Improved over the years with good overall accuracy (mean absolute relative difference of 10%), even with comorbidities However, interstitial glucose has a lag time of 5 to 15 minutes for blood glucose to reach the interstitial fluid
Utility	Guides treatment adjustments, diet, and physical activity	Constantly monitor and identify low or high glucose levels (and risks of), detailing glucose variability and guiding insulin treatment regimen Supports alerts and managing nocturnal hypoglycemia

While both SMBG and CGM serve a similar purpose, key differences in the technologies allow targeting of unique challenges and may even be used together to optimise diabetes management **(Table 3 in Page 19)**.

For example

SMBG delivers accurate, point-in-time readings, making it useful during rapid glucose changes or when symptoms conflict with CGM data[40]

CGM offers continuous monitoring, trend insights, and real-time alerts, making it especially valuable for those with fluctuating glucose levels or high risk of glycaemic events[41].

Clinical benefits of CGM

Numerous studies highlight the advantages of CGM over SMBG in improving glycemic control in both T1D and T2D on insulin therapy.

Studies consistently show that CGM use results in **greater reductions (-0.35% to -1.1%) in HbA1c levels** compared to SMBG[42–45]

CGM has shown:

- **HbA1c reductions of 0.3% to 0.5%** compared to SMBG[46–50]
- **Improved time-in-range (TIR)** in people living with Type 2 diabetes (PLWT2D)[46–50]
- Average **HbA1c decrease of 1.0%** after 12 weeks of CGM in PLWT2D treated with multiple daily injections (MDI) have also been demonstrated[51]

A trial has also found that within 24 weeks of using CGM, **73% of PLWT2D** achieved a significant **HbA1c reduction of 0.5%**[46]

This improved glycemic control from CGM use has profound effects on clinical outcomes, reducing hospitalizations from these factors in PLWT2D[52]:

39.4% **Acute diabetes complications**

up to 26.5% **Hypo- and hyperglycemia**

Even in individuals with T2D on basal or non-insulin therapies, CGM use can significantly reduce acute diabetes-related events and hospitalization rates[53].

Humanistic benefits of CGM

A systematic analysis of user' experience with CGM across US, Europe and Asia found that PwD using CGM experienced improved quality of life due to the real-time monitoring that enables timely interventions, preventing hypoglycemic and hyperglycemic events[54]. This transition from reactive to proactive care allows for better self-management, enhancing confidence of PwD and caregivers, and reducing the burden of frequent fingerstick tests[54].

CGM has been shown to empower PwD, improving their ability to follow treatment plans and leading to better clinical outcomes[54,55]. By alleviating the psychological strain of managing diabetes, CGM enables PwD and caregivers to live with fewer disruptions to their daily lives[54,56].

Furthermore, CGM can also play a role in promoting equity in diabetes care. This is particularly relevant in countries like New Zealand, where underserved groups like the Māori and Pasifika populations, experience a disproportionate burden of T2D and barriers to care[57,58]. National funding for CGM thus presents an opportunity not only to improve individual outcomes but also to address systemic disparities in access and disease burden.

It's really important to us as parents that [my son] knows that he can do everything and anything everyone else does and the CGM really helps with that.

Singaporean mother of a three-year-old who has T1D[36]

This improved quality of life, alongside the clinical benefits, underscores the value of CGM in optimising diabetes management in the long run.

Economic benefits of CGM

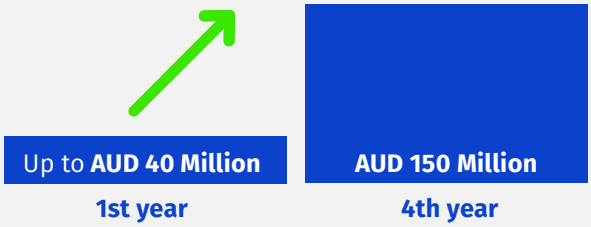
It helps a lot in different day-to-day tasks. I feel more productive. I don't need to stop in between meetings to search for my glucometer. I can take my decisions at the right time, saving time to do other tasks. It improves my quality of life."

Patient advocacy group representative

Despite the higher acquisition costs of CGM compared to SMBG testing regimens, CGM is increasingly recognised as cost-effective, particularly for PwD with elevated HbA1c or frequent hypoglycemia episodes[59]. An Australian pilot proposal assessing CGM from a societal perspective (including healthcare and productivity costs) showed that the clinical benefits could even potentially translate into short- and long-term cost savings. This can offset initial investment costs through reduced healthcare costs with fewer incidences of severe hypoglycaemia (in the short-term) and result in fewer macro- and microvascular complications (in the long-term).

By reducing severe hypoglycemic events – **each estimated to cost AUD 18,257 -** CGM could generate potential savings that could help partially offset the cost of providing CGM to PwD in need.

Potential savings while using CGM[60]



As a result, CGM is gaining recognition among policymakers and payers, with growing integration into diabetes management policies, guidelines, and reimbursement frameworks. However, it is important to note that limiting access only to individuals with elevated HbA1c may create unintended consequences. While CGM use improves glycemic control and lowers HbA1c, this improvement could render individuals ineligible for continued coverage, risking discontinuation and a potential return to poorer control. Policymakers should thus consider broader eligibility criteria that reflect clinical need while supporting sustained improvements in glycemic outcomes.

Another Australian study reported that CGM use in T1D increased quality-adjusted life expectancy by 1.199 QALYs, at acceptable cost to the healthcare system, measured by the incremental cost-effectiveness ratio (ICER) of AUD 18,020 per QALY gained, compared to SMBG[61]. This is considered to lie well within the predetermined willingness to pay threshold and acceptability criteria of the healthcare system, leading to formal reimbursement of CGM[61]. Importantly, real-world effects of national funding of CGM in Australia resulted in rapid and sustained uptake, with improvements in glycemic outcomes being achieved and maintained over time[62].

In East Asian populations, evidence similarly supports the economic benefits of CGM for diabetes management.

Japan

A study in Japan found that isCGM reduced both severe hypoglycemia events in adults with T1D, resulting in an incremental gain of 0.8 QALYs compared to SMBG[63]

The associated ICER of **~JPY 4,398,932 (US$41,212) per QALY** gained is well below Japan's accepted threshold, driven largely by fewer severe hypoglycemic events[63].

Korea

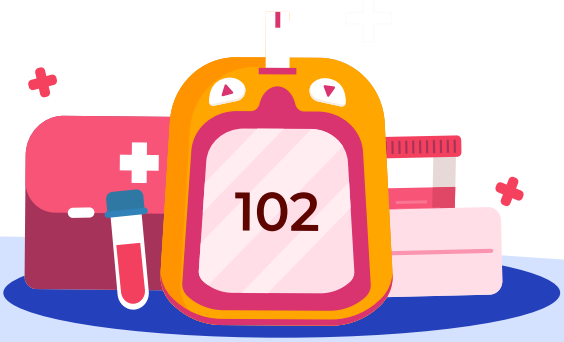
rtCGM increased QALYs by 0.683 compared to SMBG, with an ICER of KRW 24 million per QALY – significantly lower than the country's willingness-to-pay threshold of KRW 46 million[64].

This was primarily driven by reduced risks of long-term complications such as renal, ocular, neurological, and cardiovascular disease.

Although CGM incurs higher initial costs (KRW 106.8 million) compared to SMBG (KWR 90 million), **CGM was still 69.8% likely to be cost-effective and 23.4% likely to be cost-saving** considering these gains in quality of life and clinical outcomes[64].

Even in settings without reimbursement, CGM can reduce diabetes-related hospitalisations and long-term costs[4]. Studies emphasise that any intervention reducing hospitalisation costs could substantially alleviate the economic strain on both households and the broader healthcare system while enhancing quality of life for PwD and caregivers[65]. Although CGM involves higher upfront costs, which can be a challenge especially in low- and lower-middle-income countries, its clinical utility offers a compelling case for long-term savings.

By supporting better glycemic control, CGM enables better glycemic control, thereby reducing the frequency of acute diabetes complications and the associated hospitalisations[4].



Recognition of the value of CGM from major Health Technology Assessment institutions

The clinical and economic benefits of CGM have also been recognised by key Health Technology Assessment institutions across the globe.

IQWiG

Following a review by the Institute for Quality and Efficiency in Health Care (IQWiG) in Germany, the Federal Joint Committee approved CGM reimbursement in 2016 for people with T1D and T2D undergoing intensive insulin therapy and struggling to meet treatment goals[66]. Importantly, reimbursement was approved for all rtCGM in the territory.

NICE National Institute for Health and Care Excellence

In 2022, the UK's National Institute for Health and Care Excellence (NICE) concluded that isCGM was cost-effective compared to SMBG in PLWT2D on insulin, at £20,000 per QALY[67]. While rtCGM was less cost-effective for T2D on insulin (including PwD on multiple daily insulin injections) compared to T1D due to lower baseline hypoglycemia rates in T2D, NICE still acknowledged its potential value by suggesting it be considered an alternative option to future-proof reimbursement recommendations as device costs are expected to decrease in the future[67].

While a few APAC territories have established the value of CGM in their diabetes populations and started reimbursing the technology ***(see Table 2 in Page 18, and case studies below)***, access to CGM remains varied across the region. Health policies should prioritise the integration of advanced diabetes technologies such as CGM to optimise diabetes management, support better health outcomes across affected populations, and reap cost savings in the long run by reducing complications and hospitalisations.

LEARNINGS FROM THE APAC REGION

This section presents a selection of CGM reimbursement case studies from diverse health systems at different stages of maturity. These examples offer insights into how various countries have established or expanded access, despite differences in healthcare structures and resources. Common success factors include the critical role of strong clinical evidence, alignment with national priorities, stakeholder advocacy, and tailored funding models in successfully advancing CGM access.

To achieve or expand CGM reimbursement, a coordinated, multi-stakeholder effort is essential, involving policymakers, clinical experts, diabetes community advocates, and industry. This includes governments collaborating with private sectors to make CGM more accessible[68].

While these territories are still working to expand and refine their approaches, their experiences can provide useful perspectives for other regions exploring CGM reimbursement. For example, Australia's coordinated Diabetes Alliance leveraged data and bipartisan support to secure reimbursement; South Korea's integration of CGM into national guidelines and targeted funding reflects strategic policy alignment; and Taiwan's pioneering use of a medical sandbox facilitated early adoption. Other examples from Singapore, Thailand, and the UK ***(see Appendix section in Page 47)*** provide practical examples for accelerating CGM reimbursement in different settings. Readers can explore case studies most relevant to their context and priorities.

AUSTRALIA

CGM was initially reimbursed for select people living with Type 1 diabetes (PLWT1D) under 21 before expanding to all PLWT1D. The Australian National Diabetes Strategy and patient advocacy, through partnerships with Diabetes Australia, were key in raising awareness and securing funding. Building on this momentum, there has been growing interest and anticipation around expanding reimbursement to T2D on MDI.

Drivers	Details
Strong clinical and economic evidence for initial CGM reimbursement	The Diabetes Alliance coordinated among its members (including key diabetes clinical, academic and patient societies) to submit a CGM funding proposal to the Federal Government in 2015 and engaged in parliamentary meetings in Parliament to advocate for T1D CGM reimbursement[69]. The proposal summarised the clinical, humanistic, and economic benefits of CGM for three groups of PLWT1D: **People with T1D** with impaired hypoglycemia awareness and are at high risk of severe hypoglycemic events **Children under 10 with T1D** at risk of severe hypoglycemia **Pregnant women with T1D** whose blood glucose can significantly impact maternal health and fetal development By improving blood glucose management and decreasing the risk of developing complications, CGM reimbursement for T1D was projected to deliver cost savings up to $40.3 million in the first year, increasing to $160.23 million in the fourth year. The proposal also projects a steady increase in CGM uptake from 25-50% among PLWT1D over the first 3-5 years post-reimbursement as awareness and access improve.
Alignment with national priorities	Back in 2015, the Australian Government published the Australian National Diabetes Strategy 2016-2022, which recognised improved access to technology as a critical action area, presenting a policy window for stakeholders to push for CGM funding[70]. This coincided with the CGM funding proposal submitted by Diabetes Alliance to the Federal Government[69]. As a result, political parties committed to CGM reimbursement and this came to fruition in April 2017 for PLWT1D under 21[62,69].

Australia's case study to continue in the next page.

AUSTRALIA *(Continued)*

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Drivers	Details
Establishing CGM funding pathways	In 2016, an agreement between Diabetes Australia and the National Diabetes Services Scheme (NDSS) included CGM in the NDSS, alongside insulin pumps and related consumables. This integration of CGM into the revised approach to diabetes self-monitoring and management technologies made it a key component of Australia's national diabetes strategy. The goal was to ensure comprehensive and equitable access to essential tools for effective diabetes management.
Evidence to expand T1D reimbursement	An Australasian Diabetes Database Network (ADDN) registry study showcased that CGM uptake increased from 5% to 79% two years after initial CGM reimbursement in 2017[62]. CGM users showed significant improvements in blood sugar control, with a higher likelihood of reaching the target HbA1c levels at 12 and 24 months[62]. At 24 months, the risk of poorly controlled blood sugar (HbA1c ≥9.0%) was greatly reduced[62]. A cost-effectiveness analysis revealed that CGM reimbursement for PLWT1D under 21 was cost-effective with an acceptable incremental cost-effectiveness (ICER) of AUD 39,518 per quality-adjusted life-year (QALY) and expanding reimbursement to adults living with T1D showed even greater cost-effectiveness (ICER of AUD 34,890 per QALY)[71]. In 2020, Breakthrough T1D (a member of the Diabetes Alliance) commissioned a report on the economic cost of T1D in Australia which was used alongside data from the NDSS Australian Diabetes Map to demonstrate improved CGM access could alleviate the cost and impact of T1D locally. In 2021, a Diabetes Alliance Working Group released a consensus statement that called for a national framework to ensure the equitable and sustainable implementation of technologies like CGM for T1D, emphasising a shift towards personalised management goals that consider the benefits of using these technologies. Subsequently, the Alliance endorsed a submission for CGM reimbursement for all T1D. Advocates also engaged politicians in hundreds of meetings between 2021 and 2022. These efforts culminated in a bipartisan commitment of $273.1 million in 2022 to provide CGM subsidies to all PLWT1D with a maximum co-payment of $32.50 per month for individuals over 21[69].

SOUTH KOREA

South Korea's experience with CGM reimbursement began with partial coverage (70%) for PLWT1D and was later expanded to include T2D pregnant women with insulin secretion disorders. This expansion was driven by alignment with government priorities, inclusion in clinical guidelines, and strong clinical/patient advocacy. With the significant progress made, the next step for the country lies in pushing for further reimbursement expansion, though challenges remain in including the T2D population, especially those on intensive insulin therapy.

Drivers	Details
CGM inclusion in clinical guidelines	Since 2015, the Korean Diabetes Association has incorporated CGM into national guidelines, which were revised in 2023 to extend recommendations of CGM use for all adults with T1D and pregnant women to control blood glucose and reduce hypoglycemia risk. CGM-specific guidelines were also published in 2017, creating a strong clinical backing for the role of CGM as an essential tool for effective diabetes management.
Strong advocacy by clinical societies and patient groups	Clinical and patient societies have strongly advocated for the expansion of CGM access. Organisations such as the Korean Diabetes Association (KDA) and the Korean Paediatric Diabetes Association have played pivotal roles in driving changes in national policies regarding medical device reimbursement, including CGM[72]. In 2021, the KDA issued a position statement highlighting CGM's clinical benefits, safety, and global acceptance, and called for broader insurance coverage for all PLWT1D and PLWT2D on multiple insulin injections[73].
Establishing the clinical and economic benefit of CGM	The Korea National Health Insurance Service (NHIS) commissioned the Korea National Evidence-based Healthcare Collaborating Agency (NECA) to evaluate CGM's clinical and economic value in 2019[74]. NECA's findings confirmed that CGM is effective, showing equivalent or better HbA1c outcomes than SMBG in both children and adults with T1D[74]. This evidence contributed to the decision to formally reimburse CGM for the T1D population.

South Korea's case study to continue in the next page.

SOUTH KOREA *(Continued)*

South Korea's experience with CGM reimbursement began with partial coverage (70%) for PLWT1D and was later expanded to include T2D pregnant women with insulin secretion disorders. This expansion was driven by alignment with government priorities, inclusion in clinical guidelines, and strong clinical/patient advocacy. With the significant progress made, the next step for the country lies in pushing for further reimbursement expansion, though challenges remain in including the T2D population, especially those on intensive insulin therapy.

Drivers	Details
Alignment with national priorities	As part of the national strategic direction in 2022 with a newly elected president, the government made significant investments in the development of ICT-based primary care clinics to strengthen the management of patients with chronic diseases (including diabetes)[75]. The government had also previously pledged to support health insurance coverage for CGM for people with gestational diabetes and T2D on intensive insulin therapy. The NHIS was then allocated a budget of 45 million KRW to evaluate CGM insurance standards for these groups, though the study findings are not publicly available[76]. Compounding with the ageing population and low birth rates trends, the South Korean government also decided to expand treatment support for infertility and included CGM for pregnant women with diabetes as part of the 'Basic Plan for Ageing Society and Population Policy'[77]. This was followed by the 'Measures to Reverse the Low Birth Rate Trend' announced in June 2024, which allocated 3.6 billion KRW to support CGM devices for pregnant women with diabetes[78]. However, due to ongoing political hurdles, the timeline for reimbursing CGM for T2D remains unclear, underscoring the need for continued advocacy.

TAIWAN

Taiwan began reimbursing CGM in 2017, initially covering individuals with T1D, neonatal diabetes, and post-pancreatectomy diabetes. This foundational step was influenced by strong clinical uptake, formal guideline inclusion, and stakeholder alignment. Over time, Taiwan expanded reimbursement to people with gestational diabetes on insulin therapy and increased access for PLWT1D[79]. This expansion, supported by an additional NT$2.5 million investment from the National Health Insurance Administration (NHIA), was projected to benefit approximately 512 more individuals each year[79]. While progress has been significant, coverage for the broader T2D population remains limited, highlighting opportunities for continued advocacy.

Drivers	Details
Recognition and adaptation of international experiences	The government has prioritised enhancing integrated care to slow chronic disease progression and reduce complications, aligning with global diabetes care trends[79]. NHIA has also identified diabetes as the 3rd largest disease in terms of health insurance costs, with annual expenditures exceeding NT$40 billion in the country[80]. During the NHI reimbursement discussions, the committee recognised that other reference countries such as Japan had acknowledged the benefits of CGM and had already incorporated it into their national health insurance coverage, serving as a model for Taiwan's reimbursement decision[81,82].
Ensuring effective CGM adoption through the Diabetes Shared Care Programme (DSCP)	Launched in 2001, DSCP has been instrumental in improving diabetes management and supporting CGM reimbursement. It integrates services such as lifestyle counselling and glucose monitoring through multidisciplinary care teams. To ensure effective implementation, the NHI committee recommended that CGM reimbursement be initially limited to medical institutions participating in the DSCP[81]. *Over time, this restriction was eased as an increasing number of healthcare practitioners began prescribing CGM more frequently for their patients, following appropriate education and training on suitable cases for CGM use.* **Clinician KOL**

Taiwan's case study to continue in the next page.

TAIWAN *(Continued)*

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Drivers	Details
Demonstrating the value of CGM through clinical, humanistic, and economic evidence	The clinical committee in Taiwan played a key role in advocating for the reimbursement of CGM. They recognised that robust evidence (from both local and international studies) is essential to persuade the government by demonstrating the benefits of CGM along with its potential for future cost savings. Although the full details of the submitted rationale were not made public, the proposer, Changhua Christian Hospital, had conducted several supporting studies, including a literature review and three case reports highlighting improvements in glycaemic control[83]. During the NHI meeting in November 2016, clinical evidence presented showed CGM's potential to lower HbA1c, reduce hypoglycaemia, and prevent renal and cardiovascular complications, as well as decrease emergency visits and hospitalisations - all of which contributed to the rationale and decision making for CGM reimbursement[81].
Stakeholder input in CGM reimbursement decision-making	Various organisations such as the Endocrine Society, Diabetes Society, Pediatrics Society, and Changhua Christian Hospital voiced strong support for CGM, contributing to the decision-making for CGM reimbursement. The NHI committee noted that while the prevalence of T1D is increasing, the projected annual CGM application volume was estimated at 6,000 person-times[81]. Further discussions with the representatives from the societies and hospitals estimated that ~30% of Taiwan's 10,800 PLWT1D - those with HbA1c > 8% - would be eligible for CGM. Based on this input, the committee approved CGM reimbursement, limited to twice per year with a minimum 3-month interval, and reassessment every 6 months[82].

Taiwan's case study to continue in the next page.

TAIWAN *(Continued)*

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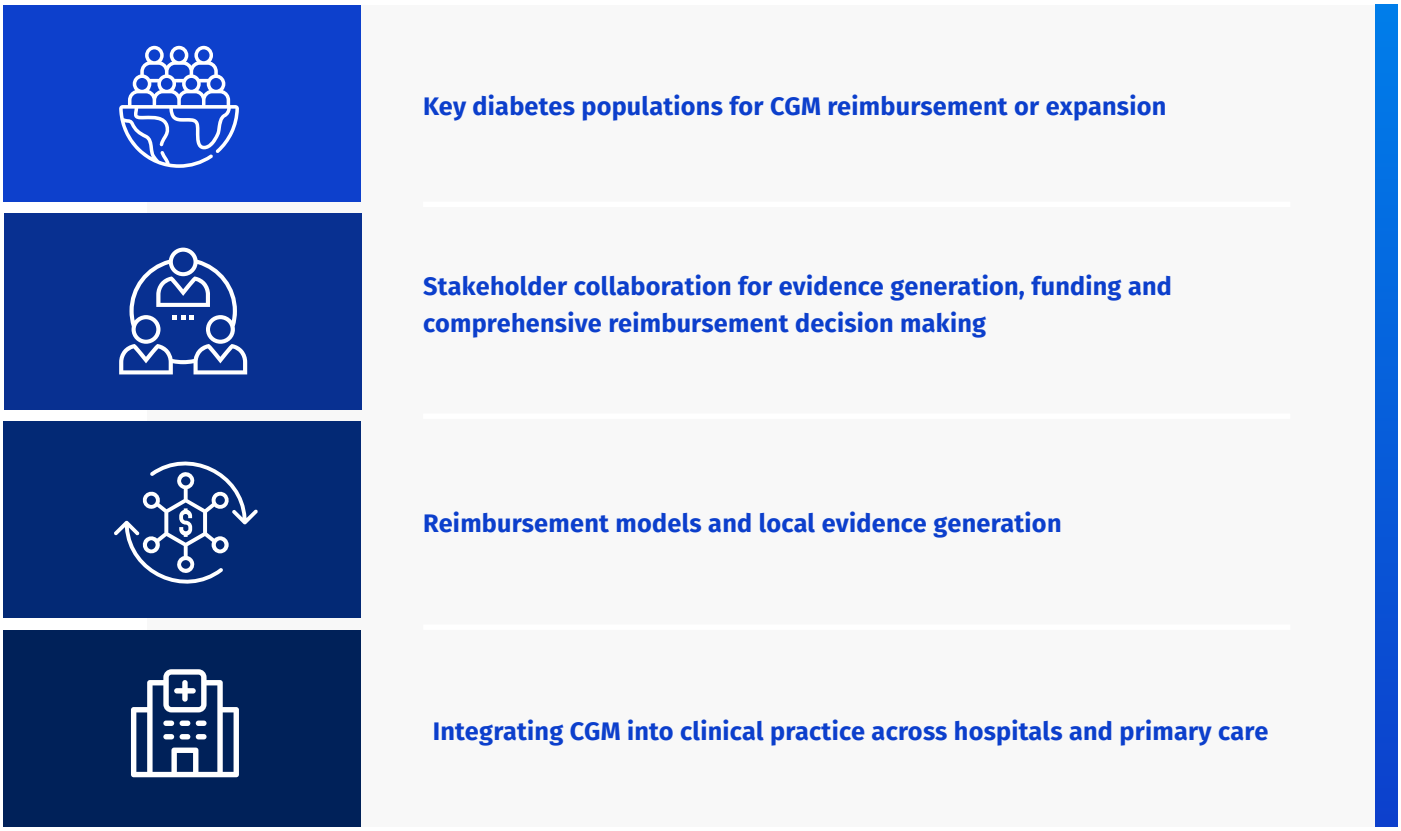
Drivers	Details
CGM reimbursement implementation through the medical sandbox	Taiwan has a large healthcare insurance budget which is divided into two parts: 1. Regular expenses; 2. Medical sandbox (where CGM falls under) The country has drawn learnings from other countries, such as the US and Singapore, where medical sandboxes are used to pilot novel healthcare solutions before full-scale adoption. The existence of the medical sandbox has similarly provided a platform for reimbursing advanced medical technologies that address high unmet medical needs in Taiwan, such as CGM for diabetes management. As mentioned in the NHI reimbursement meetings, some funds should be reserved at the end of the year to add new technology, in which CGM was considered[82].
Routine use of CGM by clinicians and its inclusion in clinical guidelines	The clinical value of CGM has long been acknowledged by clinicians, with routine use in practice well before its inclusion in formal guidelines in 2018. Diabetologists and diabetes educators in Taiwan receive regular training and are familiar with the usage of CGM, especially T1D, which facilitated the early widespread adoption of CGM through the Diabetes Shared Care Programme (DSCP). The NHI committee also acknowledged CGM's uptake across hospitals, which helped drive the 2017 decision to approve CGM reimbursement for T1D in both inpatient and outpatient settings[81,82,84]. The Diabetes Association of the Republic of China (Taiwan) later published a CGM-specific guideline in 2020, highlighting its role in diabetes management. The guideline was updated in 2023 to include the recommendation of CGM for PwD who fail to achieve target HbA1c levels and experience episodes of hyperglycemia/hypoglycemia, as well as for pregnant women with gestational diabetes under insulin therapy. This update further strengthened the clinical case for expanding reimbursement, which was approved in November 2023.

RECOMMENDATIONS TO ACHIEVE AND EXPAND CGM REIMBURSEMENT IN ASIA PACIFIC

This section outlines a strategic roadmap aimed at improving CGM reimbursement and, by extension, diabetes management within each territory archetype. The recommendations in this roadmap are informed by lessons learned from the case studies provided earlier, while also considering the unique drivers and barriers specific to CGM reimbursement in each archetype.

While cost, infrastructure and compelling evidence are commonly identified as primary barriers to achieving or expanding CGM reimbursement in the case studies, it is important to also consider other challenges - such as social stigma, public health literacy, and regulatory hurdles - in the recommendations to ensure a more holistic approach to reimbursement.

Each roadmap will cover the following:



Recommendation	Nascent		Expanding	Established
	Resource-limited systems	Broader financing system		
Prioritise CGM reimbursement for all individuals with T1D	✓	✓		
Expand CGM reimbursement for T2D on intensive insulin/MDI			✓	
Expand CGM reimbursement to include all PLWT2D, including non-insulin users				✓
Explore public-private partnerships (PPPs) and private insurance collaborations to pilot and fund CGM programmes	✓			
Expand funding mechanisms and stakeholder incentives to broaden CGM access	✓	✓	✓	
Establish / Strengthen diabetes registries to generate local data	✓	✓	✓	
Establish clear metrics and guidelines for CGM use	✓			
Engage KOLs, patient advocacy groups, and industry to address information gaps		✓	✓	
Amplify the community voice for the broader T2D community				✓

Through the implementation of tailored roadmaps, APAC countries can initiate or expand CGM reimbursement, driving wider adoption. This approach allows for significant progress towards effective diabetes management, improving clinical outcomes and reducing the long-term burden of complications and associated healthcare costs.

RECOMMENDATIONS FOR NASCENT TERRITORIES

Territories with evolving healthcare coverage and resource-limited public systems

For example:


The Philippines


Vietnam


India


Pakistan

Nascent territories:
Particularly those with developing health systems and limited public financing capacity - face considerable challenges in advancing CGM reimbursement. National policies for primary and secondary prevention of diabetes may not be implemented effectively nationwide, with national clinical guidelines in most territories (except Viet Nam and India) omitting CGM. Diabetes-related healthcare expenditure per person is also relatively low - USD 114 in India and USD 324 in Indonesia - compared to other archetypes ***(Table 2 in Page 18)***. These imply resource constraints that may limit the ability to reimburse and integrate CGM into clinical practice. A multi-faceted strategy is needed, focusing on prioritising CGM for T1D vulnerable populations, establishing / leveraging diabetes registries, and setting clear metrics for effective use. Vulnerable PwD populations may include individuals with severe/recurrent hypoglycemia (particularly children with T1D), those with impaired hypoglycemia awareness, and pregnant women with T1D.

1. Prioritise CGM reimbursement for all individuals with Type 1 Diabetes (T1D), especially the vulnerable groups

Nascent

Global and regional studies consistently demonstrate CGM's effectiveness in improving glycemic control and enhancing QALYs at acceptable cost-effectiveness thresholds[42–45,61,63,66,85]. Clinical guidelines across APAC, as well as expert consensus from nascent territories, recommend CGM for all PLW1D based on robust clinical and economic data from the region, as well as practical resource considerations. CGM, an advancement from SMBG, has been demonstrated as a promising solution to diabetes management, where territories such as Thailand have reimbursed CGM for T1D, resulting in increased CGM adoption and better glycemic outcomes ***(see case study in Appendix section, Page 47)***[86]. While reimbursement for all PLWT1D should remain the long-term goal, a phased approach could be adopted to ensure sustainability in resource-constrained environments.

Initial reimbursement efforts could start with vulnerable subgroups of T1D, such as in the Australia case study where reimbursement started with PLWT1D under 21 years old before expanding to all T1D individuals. Such a targeted approach offers a clinically impactful and cost-saving entry point by reducing emergency visits and hospitalisation rates over time. Additionally, given the presence of populations with diverse income levels across these territories, flexible co-payment or tiered subsidy models could be considered, as exemplified in South Korea's case study[87], to expand access to CGM while managing public expenditure constraints.

2. Explore public-private partnerships (PPPs) and private insurance collaborations to pilot and fund CGM programmes

Nascent

PPPs serve as a critical enabler to initiate targeted CGM pilot programmes, especially where formal reimbursement is limited by evidence gaps and resource constraints. Governments can collaborate with CGM manufacturers, healthcare providers, and local governments to co-develop and co-fund small-scale pilots, particularly for high-priority T1D subgroups. It will be important to secure early buy-in from such key stakeholders, to ensure successful implementation. These initiatives should also align with broader diabetes or chronic disease programmes, helping reduce financial risks while building local evidence on CGM's impact.

This is exemplified by Singapore's DigiCoach Programme, an ongoing initiative where CGM devices are provided alongside lifestyle coaching to support better self-management and glycemic outcomes[88]. Complementing these efforts, engaging private insurers to introduce incentive mechanism like premium discounts linked to glycemic control can further reinforce CGM adherence and promote long-term self-management, reducing the burden of diabetes complications on health systems.

3. Establish or strengthen diabetes registries for local data generation to guide feasible and targeted CGM pilot programmes

Nascent

Establishing or expanding diabetes registries can be considered a medium-term goal to be developed alongside or after CGM pilot programmes. The registries could provide valuable data to identify high-need subpopulations and monitor outcomes, guiding the design of targeted CGM pilot programmes. Pilots should prioritise regions with high diabetes burden or vulnerable T1D groups, offering a pragmatic approach to generating real-world clinical and economic evidence, addressing initial budget constraints. Governments could also collaborate with ongoing initiatives by various stakeholders in the ecosystem, from local providers to both insulin and device manufacturers, to enhance on-the-ground data sources for a clearer understanding of unmet needs.

4. Establish clear metrics and guidelines for CGM use and glycemic control to ensure effective integration of CGM into clinical practice before and after reimbursement

Nascent

Ensuring that CGM delivers its full benefits, it should be properly integrated into the diabetes management journey, including accurate interpretation and use of data in both hospital and primary care settings. The APAC consensus statement offers a strong starting point, with standardised and regionally relevant CGM metrics.

An example from the region, such as Hong Kong's Hospital Authority system module, incorporates CGM metrics into clinical modules, demonstrating how CGM data could be operationalised and embedded into routine practice. Community education and professional training, such as Association of Diabetes Educators Singapore's CGM workshops, alongside public-private partnerships like Korea's Diabetes Research Foundation collaboration with Kakao Healthcare, can also serve as inspiration to encourage optimal CGM utilisation in clinical practice[4,89].

Territories with broader healthcare financing and health infrastructure

For example:


Malaysia


Hong Kong

Nascent territories:
Some nascent territories possess broader health financing systems and public health infrastructure, which allows a more conducive environment for CGM adoption and scale-up. National policies for primary and secondary prevention of diabetes are implemented nationwide effectively, with national clinical guidelines gradually including the use of CGM. Diabetes-related healthcare expenditure per person is higher for this subclassification of nascent territories, with a spending of USD 1091 in Malaysia ***(Table 2 in Page 18)***. Territories are thus well positioned to shift from basic access challenges towards optimising long-term value through CGM. Strategic priorities in these settings will include prioritising CGM for PLWT1D, engaging stakeholders to capture gaps on the benefits of CGM and leveraging diabetes registries.

1. Prioritise CGM reimbursement for all individuals with Type 1 Diabetes (T1D), especially the vulnerable groups

Nascent

With the foundation available to support advanced chronic disease management, CGM reimbursement should be prioritised for all PLWT1D. This aligns with global and regional studies, which consistently demonstrate CGM's effectiveness in improving glycemic control and enhancing QALYs at acceptable cost-effectiveness thresholds[42–45,61,63,66,85]. International and APAC guidelines, supported by regional consensus, recommend CGM for all PLWT1D based on strong regional evidence and available resources.

CGM has also proven its value even in health systems where SMBG is not reimbursed. For example, in Singapore, CGM is subsidised for PLWT1D despite the absence of full public funding for SMBG, reflecting its recognised value in improving outcomes for vulnerable groups. To ensure sustainability, governments may consider phased reimbursement approaches, such as initiating reimbursement for pediatric T1D populations. Additionally, reimbursement mechanisms such as tiered or co-payment models can also be considered to help lower out-of-pocket expenses and ensure financial sustainability, as exemplified in South Korea's case study[87].

2. Engage KOLs, patient advocacy groups, and industry to capture diverse perspectives and address information gaps on the benefits of CGM

Nascent

Growing advocacy from clinicians and patient advocacy groups underscores the need for structured mechanisms to incorporate patient advocates input into decision-making - currently lacking in many HTA processes across the region. Malaysia is one of the few territories with such mechanisms, allowing lived experiences to inform reimbursement decisions. Including these perspectives not only improves public health literacy around diabetes and CGM technologies but also supports the development of person-centred reimbursement policies grounded in real-world outcomes.

To avoid tokenism, these engagements must be underpinned by diversity, inclusivity, safe environment, empowerment, with genuine co-design and co-governance structures. Collaboration with advocacy groups (e.g., Hong Kong's Youth Diabetes Action) and manufacturer-led evidence generation can also reduce stigma and boost CGM adoption post-funding. Successful initiatives like Australia's Diabetes Alliance, Korea's Diabetes Association position statement, and Singapore's HTA process exemplify effective, coordinated approaches to securing reimbursement that address local needs.

3. Leverage and expand established diabetes registries to generate relevant local data and inform pilot CGM programme planning

Nascent

Comprehensive diabetes registries in these territories offer a strong foundation for identifying priority subgroups, tracking real-world outcomes, and assessing long-term cost-effectiveness - critical inputs for shaping sustainable reimbursement policies and wider programme scale-up. Rather than focusing solely on initial pilot planning, these territories could use the registry data to support evaluation and optimisation of CGM implementation across diverse care settings, and to monitor equity in access and impact.

RECOMMENDATIONS FOR EXPANDING TERRITORIES

Territories with evolving healthcare coverage and resource-limited public systems

For example:


Thailand


Singapore


Australia


New Zealand


South Korea


Taiwan

Expanding territories:
Implemented CGM reimbursement for T1D, with Taiwan and South Korea also covering pregnant women with insulin-treated gestational diabetes. These territories also maintain comprehensive primary prevention policies and exhibit higher diabetes-related healthcare spending than nascent territories. However, except for Australia and New Zealand, secondary prevention policies in most territories do not reference advanced technologies like CGM, despite local guidelines recommending its use.

1. Consider expanding CGM reimbursement for people living with Type 2 Diabetes (PLWT2D) on intensive insulin/MDI

Expanding

Leading international and regional guidelines consistently endorse CGM for PLWT2D on intensive insulin, who, like those with T1D, face suboptimal glycaemic control and high hypoglycemia risk[4]. Clinical and economic benefits include reduced healthcare utilisation, mainly from fewer diabetes complications such as ketoacidosis[90].

Countries like the UK recognise the significant quality-of-life impact of hypoglycemia in T2D and have implemented reimbursement policies accordingly, resulting in greater CGM adoption and improved outcomes ***(see UK case study in Page 53)***. This evidence supports expanding CGM reimbursement to PLWT2D on intensive insulin to enhance patient care to a level comparable to T1D populations.

2. Leverage local diabetes registries to generate evidence on CGM use in T2D and inform expanded funding opportunities

Expanding

Similar to nascent territories, governments can collaborate with different stakeholders to enhance data capture systems and registries to generate local evidence confirming CGM's benefits for T2D and its subpopulations. Tiered or co-payment models and public-private partnerships can then provide higher subsidies for priority groups, such as PLWT2D on MDI, the elderly, children, or by income level, as demonstrated in Singapore.

3. Engage clinicians, patient advocacy groups, and public health experts to inform person-centred CGM reimbursement for T2D and its complications

Expanding

Multistakeholder collaboration among endocrinologists, cardiologists, diabetes nurses, and T2D community representative organisations is critical to designing CGM reimbursement strategies that are both effective and equitable. Ensuring affordability is key to long-term programme feasibility, integrating CGM into existing chronic disease programmes where diabetes management plays a preventive role can support scalable implementation. Patient advocacy groups play a vital role in raising public awareness of advanced diabetes technologies and conveying community perspectives, addressing the current underrepresentation in T2D advocacy. Public health experts can evaluate CGM's population-level impact on managing chronic diseases and reducing complications associated with T2D.

Drawing on successful examples from Germany and the UK, where multisector collaboration informed funding approvals, such coordinated efforts can drive equitable, evidence-based and person-centred reimbursement tailored to local healthcare priorities.

4. Expand funding mechanisms and stakeholder incentives to broaden CGM access

Expanding

Governments can explore collaborations with manufacturers to extend reimbursement coverage to T2D populations, particularly those on intensive insulin/MDI. Such public-private partnerships can help mitigate risks while building additional evidence of CGM's benefits in these subpopulations. An example is Singapore's DigiCoach Programme, an ongoing initiative that provides eligible participants with CGM devices alongside lifestyle coaching to support better self-management and glycemic outcomes[88]. Payers can also consider premium discount schemes to reward optimal glucose monitoring, supporting sustained CGM use, while ensuring that the more vulnerable groups are not left out[91]. Engaging private insurers to offer premium reductions for people with well-controlled diabetes will further promote effective disease management and reduce overall costs associated with diabetes complications.

RECOMMENDATIONS FOR ESTABLISHED TERRITORY

Territories with evolving healthcare coverage and resource-limited public systems

For example:

Japan

Established territories:
Made significant progress in reimbursing CGM for most recommended diabetes populations, including those with T1D, pregnant women with gestational diabetes, and T2D on intensive insulin therapy. Japan, for example, has a broad coverage of CGM and a robust primary prevention policy. However, similar to expanding territories, secondary prevention policies promote advancements in diabetes management and digital health but omit explicit references to advanced technologies like CGM. Moreover, there remains an opportunity to broaden reimbursement to encompass all PLWT2D - including those not on insulin - who stand to gain from enhanced glycemic control and improved health outcomes.

1. Consider expanding CGM reimbursement to include all PLWT2D, encompassing those on non-insulin therapies

Established

While CGM reimbursement typically focuses on PwD with the greatest unmet need, many PLWT2D on non-insulin regimens continue to struggle with poor glycemic control and unrecognised hypoglycaemia. International guidelines, including those from the ADA, recommend CGM to be considered for PLWT2D treated with glucose-lowering therapies other than insulin, as a means to achieve and sustain individualised glycemic goals[92].

A study conducted in Korea also found that even non-insulin-treated PLWT2D benefit from CGM, particularly those who use SMBG frequently[93]. To address budget concerns, fixed monthly subsidies such as Japan's model capping funding irrespective of sensor use and bundling CGM into broader diabetes care packages can be adopted. Governments should pilot such approaches to preserve access to innovation, improve outcomes, and encourage continued manufacturer investment.

2. Amplify the community voice for the broader T2D community

Established

Continuous engagement and empowerment of the wider T2D patient community - including those on basal insulin and non-insulin therapies - is critical to ensuring equitable access to diabetes management technologies like CGM. This could be done through collaboration with national diabetes organisations (e.g., Japan Diabetes Society), which play a crucial role in advocating for the needs of PLWT2D.

In countries like Japan, stigma may also deter individuals from seeking care, reinforcing the need for stronger advocacy to improve access[94]. Australia's experience with patient-led advocacy, which expanded CGM reimbursement for all PLWT1D and built momentum for T2D MDI access, offers valuable insights for the broader APAC region.

Platforms for diabetes community and clinical engagement can also be further strengthened ***(see Singapore case study in Page 52)***, which not only can improve policy outcomes but also support inclusive, person-centred reimbursement.

CALL-TO-ACTION

Diabetes continues to impose a significant and growing burden across the Asia Pacific region, impacting health systems, economies, and communities. CGM represents a proven and effective technology that enhances diabetes management by improving glycemic control, reducing complications, and supporting better quality of life.

Despite strong clinical and economic evidence, access to CGM remains inconsistent across the region. Many nascent and expanding territories have yet to incorporate CGM into reimbursement frameworks, particularly for PLWT2D. Addressing this requires a strategic, phased approach: prioritizing reimbursement for T1D, expanding coverage to key T2D subpopulations, and building policies that are informed by local data, PwD's lived experiences, and expert insights.

Governments can reduce financial barriers and uncertainty through partnerships with manufacturers, investment in diabetes registries, and innovative funding models, including tiered subsidies and public-private collaborations. Additionally, fostering patient advocacy and engaging a broad range of clinical and public health stakeholders will strengthen the evidence base and ensure policies remain person-centred and responsive to local healthcare priorities.

By advancing equitable access to CGM, policymakers can improve health outcomes, optimise healthcare resources, and ultimately reduce the long-term economic impact of diabetes. Coordinated action now will help transform diabetes care across Asia Pacific and support sustainable, high-quality healthcare for the millions affected.

The following stakeholders are essential and play a key role in advancing CGM across the Asia-Pacific region:

(Key actions of each stakeholder are provided in the next page)

Policymakers

Payers

Providers

Clinicians

Industry, inclusive of MedTech, Pharma, and private financing institutions

Academics

Patient advocacy groups

POLICYMAKERS CAN:

- Work towards integrating CGM into national diabetes strategies and essential benefits packages to ensure equitable access
- Earmark dedicated funding for diabetes technologies under health budgets or innovation funds

PAYERS CAN:

- Collaborate with industry, clinicians, and patient groups to establish or expand CGM reimbursement for priority patient populations, considering innovative payment and funding mechanisms (e.g., outcome-based reimbursement, bundled payments) to expand affordability

PROVIDERS CAN:

- Establish or strengthen diabetes registries to generate local evidence and inform policy and reimbursement decisions
- Engage in PPPs and collaborations to broaden access and execute pilot CGM programs

CLINICIANS CAN:

- Advocate for the value and impact of CGM in managing diabetes in their clinical practice
- Lead professional and patient education programs on CGM, its clinical benefits, and its role in optimising diabetes management
- Work with medical societies, providers, and patient groups to address misconceptions and ensure CGM use is integrated into clinical guidelines or protocols

INDUSTRY, INCLUSIVE OF MEDTECH, PHARMA, AND PRIVATE FINANCING INSTITUTIONS, CAN:

- Partner with payers and providers to co-fund pilots, generate health-economic evidence, and demonstrate the value of CGM
- Invest in awareness and training initiatives to build familiarity and adoption of CGM among clinicians and patients

ACADEMICS CAN:

- Lead research and evaluations to strengthen local evidence on the clinical and economic benefits of CGM
- Support registries and data-sharing platforms to strengthen the evidence base for CGM adoption
- Disseminate findings to policymakers and payers to inform sustainable reimbursement decisions

PATIENT ADVOCACY GROUPS CAN:

- Provide education and peer support to build confidence in CGM adoption among patients
- Amplify the voices of people with diabetes to highlight the need for equitable access to CGM

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APPENDIX

Assessment framework and scorecard for CGM adoption, integration and reimbursement in diabetes management across APAC

Table A1: Assessment framework for CGM adoption, integration and reimbursement in diabetes management across APAC (1/2)

Considerations	Criteria
Primary prevention policies aimed at preventing and managing NCDs, including diabetes	**1 - Primary prevention efforts are not yet fully developed:** • Covers 1-2 of the following: » (1) Public awareness and education of diabetes risk factors and prevention; » (2) lifestyle modification programmes; » (3) community-based programmes; » (4) integration of diabetes prevention into broader NCD public health programmes • Only covers specific regions through pilot programmes or provincial government initiatives • No time-bound action plan or milestones • Stakeholder roles are not specified **2 – Primary prevention efforts are broad in scope but implementation is still evolving:** • Covers 3-4 of the following: » (1) Public awareness and education of diabetes risk factors and prevention; » (2) lifestyle modification programmes; » (3) community-based programmes; » (4) integration of diabetes prevention into broader NCD public health programmes • Aspires to achieve nationwide coverage (though current implementation focuses on specific regions) • No time-bound action plan or milestones and/or clearly defined stakeholder roles **3 – Primary prevention efforts are comprehensive and well-established:** • Covers all of the following: • (1) Public awareness and education of diabetes risk factors and prevention; • (2) lifestyle modification programmes; • (3) community-based programmes; • (4) integration of diabetes prevention into broader NCD public health programmes • Nationwide coverage and implementation
Secondary prevention policies aimed at preventing and managing NCDs, including diabetes	**1 - Secondary prevention efforts are not yet fully developed:** • Covers 1-2 of the following: » (1) Early screening and detection of complications such as cardiovascular disease, retinopathy, etc; » (2) glycemic control and personalised treatment plans including the use of technology such as CGM; » (3) multidisciplinary care; » (4) diabetes self-management education • Only covers specific regions through pilot programmes or provincial government initiatives • No time-bound action plan or milestones • Stakeholder roles are not specified **2 – Secondary prevention efforts are broad in scope but implementation is still evolving:** • Covers 3-4 of the following: » (1) Early screening and detection of complications such as cardiovascular disease, retinopathy, etc; » (2) glycemic control and personalised treatment plans including the use of technology such as CGM; » (3) multidisciplinary care; » (4) diabetes self-management education • Aspires to achieve nationwide coverage (though current implementation focuses on specific regions) • No time-bound action plan or milestones and/or clearly defined stakeholder roles **3 – Secondary prevention efforts are comprehensive and well-established:** • Covers all of the following: » (1) Early screening and detection of complications such as cardiovascular disease, retinopathy, etc; » (2) glycemic control and personalised treatment plans including the use of technology such as CGM; » (3) multidisciplinary care; » (4) diabetes self-management education Nationwide coverage and implementation • Nationwide coverage and implementation • Time-bound action plan or milestones • Clearly defined stakeholder roles

(Table A1 to continue in the next page)

Table A1: Assessment framework for CGM adoption, integration and reimbursement in diabetes management across APAC (2/2)

Considerations	Criteria
CGM recommendations in locally relevant guidelines	**1 - Locally relevant guidelines do not recommend CGM for diabetes management** **2 - Locally relevant guidelines recommend CGM for select PwD types (e.g. T1D or T2D with MDI)** **3 - CGM recommended for all individuals with diabetes including Type 1 and Type 2 diabetes**
Patient advocacy	**1 - No patient advocacy for CGM** **2 - There is patient advocacy for CGM but there are no mechanisms for payers to consider lived experience perspectives in reimbursement decision making for diabetes** **3 - Patient advocacy efforts for CGM have influenced CGM reimbursement decisions and/or there are mechanisms for payers to consider diabetes community perspectives in reimbursement decision making for diabetes**
Diabetes registry	**1 - No national or regional diabetes registry** **2 - Diabetes registry only covers certain hospitals or regions, and/or captures some (but not all) of these: patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records** **3 - National diabetes registry captures patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records**
Reimbursement of SMBG	**1 - No SMBG reimbursement** **2 - SMBG is reimbursed for several types of diabetes patients (E.g., Type 1, gestational diabetes, etc.)** **3 - SMBG is reimbursed for all types of people with diabetes**
Reimbursement of CGM	**1 - No CGM reimbursement** **2 - CGM is only reimbursed for T1D and gestational diabetes** **3 - CGM is reimbursed for several types of diabetes patients including people with Type 1 and select people with Type 2 diabetes**

Table A2: Diabetes assessment scorecard across APAC (1/2)

	Nascent							Expanding						Established
Category	The Phiippines	Vietnam	India	Indonesia	Pakistan	Malaysia	Hong Kong	Thailand	Singapore	Australia	New Zealand	South Korea	Taiwan	Japan
Primary prevention policies / programmes for diabetes	The National Policy on Strengthening the Prevention and Control of Chronic Lifestyle-Related Non-Communicable Diseases emphasises an integrated, comprehensive, and community-based approach to prevent and control lifestyle-related NCDs, including diabetes.	The National Strategy for Prevention and Control of Non-Communicable Diseases (2015-2025) aims to reduce the prevalence of NCD risk factors and enhance early detection and management.	India's National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) focuses on health promotion and risk reduction for NCDs, including diabetes.	The "Gerakan Masyarakat Hidup Sehat" (GERMAS) program promote healthly lifestyles and regular check-ups to prevent NCDs like diabetes.	The Non-Communicable Diseases & Mental Health National Action Framework 2021-30 aims to reduce premature mortality from NCDs (including diabetes) by one-third through prevention and treatment, promoting mental health and well-being. d clear time-bound milestones.	The National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2016-2025 provides an overarching framework for strengthening NCD prevention and control in Malaysia.	The government has launched the "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong", which includes various measures such as health communication campaigns to raise public awareness about lifestyle factors for diabetes management.	A 5-year (2017–2021) national plan for the prevention and control of NCDs was adopted in 2017 to guide and promote a range of policy measures and initiatives to address NCDs.	Singapore's Ministry of Health declared a "War on Diabetes" to reduce the diabetes burden through early detection, management, and education. Campaigns like "Let's Beat Diabetes" and "Healthier SG" further promote prevention and public awareness.	"Australia has established comprehensive national strategies to address diabetes and promote preventive health, including the National Preventive Health Strategy (2021–2030) and the targeted Australian National Diabetes Strategy (2021–2030). "	New Zealand has implemented a comprehensive national strategy to address diabetes prevention through the Diabetes Action Plan 2022–2027, supported by broader public health frameworks such as Whakamaua: Māori Health Action Plan 2020–2025 and Ola Manuia: Pacific Health and Wellbeing Action Plan 2020–2025.	The Korea Health Promotion Institute has developed programs focusing on lifestyle modifications, including dietary improvements and increased physical activity, to reduce the risk factors associated with NCDs.	The Health Promotion Administration (HPA) develops lifestyle educational materials such as the "Diabetes and Me" handbook and health education posters to empower patients through the Diabetes Shared Care System.	Health Japan 21 aims to improve public health by promoting balanced diets, regular physical activity, and healthy lifestyles to reduce the incidence of lifestyle-related diseases, including diabetes.
Secondary prevention policies / programmes for diabetes	The National Diabetes Prevention and Control Plan is a long range national plan for the prevention and control of diabetes mellitus and its complications in Philippines.	The national diabetes program, initiated by MOH, focuses on improving diabetes care through early detection, capacity building and patient education.	India's National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) emphasizes early detection through screening programs to identify diabetes and other NCDs in their early stages and capacity building to train healthcare professionals to effectively manage and treat NCDs.	In general, screening or early detection of NCD is carried out in two ways: Independent or self-screening such as NCD Guide at FKTP & Mobile JKN, as well as mass screening such as Posyandu PTM (commonly known as Posbindu) and Prolanis.	The National Action Framework for NCDs and Mental Health (2021–2030) recommends diabetes screening and glycaemic control at primary healthcare centres. The Prime Minister's Program for Prevention and Control of Diabetes Mellitus focuses on managing diabetes in federal areas and strengthening provincial capacity to deliver universal access to diagnosis and treatment.	Malaysia has implemented several secondary prevention initiatives aimed at managing non-communicable diseases (NCDs), particularly diabetes.	Hong Kong has established nationwide screening programs, such as Chronic Disease Co-Care (CDCC), a pilot scheme that provides subsidised screening and long-term follow-up for residents aged 45 or above without known diabetes or hypertension.	Under the strategy, all eligible people (> 35 years) are screened annually for diabetes in primary care. Patients with diabetes are screened annually for diabetic retinopathy, kidney disease and foot lesions at health facilities to monitor complications.	The "War on Diabetes" initiative ensures reduction of diabetes burden through early detection, effective disease management, and public education.	Australian National Diabetes Strategy includes promoting integrated health checks for diabetes and implementation of programs to manage diabetes and its complications.	New Zealand's Diabetes Action Plan 2022–2027 outlines a national strategy to strengthen early intervention and the management of diabetes and its complications.	In Korea, NHSPs screened for unhealthy lifestyles and provide adequate early diagnosis free of charge or at minimal cost for various diseases including diabetes mellitus and dyslipidemia.	MOHW conducts nationwide campaigns to educate the public on diabetes prevention, emphasizing the importance of regular health check-ups and early detection. The government has recently expanding the screening age, with a diabetes pay-for-performance (P4P) program to encourage healthcare providers to offer comprehensive diabetes care.	Health Japan 21 ensures that the country's national insurance system provides extensive coverage for diabetes care, including regular monitoring, medications, and advanced treatments, ensuring equitable access to necessary medical services.
Recommendations of CGM in locally relevant guidelines	Do not include specific recommendations regarding the use of CGM devices.	Guidelines are not publicly accessible, but seems to recommend CGMs for type 1 diabetes, and type 2 diabetes patients with uncontrolled blood glucose despite oral medication or insulin therapy.	Use of CGM for T1D, T2D patients with MDI after judgement by the treating physician, and short-term use for pregnant women with diabetes	Do not include specific recommendations regarding the use of CGM devices.	Do not include specific recommendations regarding the use of CGM devices.	Use of CGM for those with T1D and those with T2D on insulin therapy who experience recurrent hypoglycemia, hypoglycemia unawareness, or are not achieving glycemic targets	Use of CGM for those with T1D and those with T2D on intensive insulin therapy or who experience dramatic glycemic variability	Use of CGM in patients with T1D or T2D treated with insulin, who experience frequent hypoglycemia or hypoglycemia unawareness.	ACE guidelines, which are intended to replace local guidelines and are updated every five years, recommend the use of CGM devices in patients with T1D	Use of CGM for adults with T1D who are using multiple daily injections; CGM devices may also be used in the management of other diabetes such as T2D, especially for those at high risk of hypoglycaemia, with impaired awareness of hypoglycaemia and with high glucose variability	Use of CGM for people with T1D. CGM may also be considered in selected individuals with T2D, particularly where conventional monitoring is insufficient or where there is a high risk of hypoglycaemia or significant glucose variability.	Use of CGM for adult T1DM patients and pregnant T1DM patients. It is also encouraged for adults with T2DM who require MDIs.	Use of CGM for all individuals, including T1D and T2D patients, especially: T1D patients who do not meet target and develop ketoacidosis, diabetic patients who do not meet HbA1c level and experience hyperglycemia or hypoglycemia, diabetic patients with extreme glucose fluctuations.	Use of CGM for all individuals, including T1D and T2D for both pediatric and adult patients

(Table A2 to continue in the next page)

Table A2: Diabetes assessment scorecard across APAC (2/2)

	Nascent							Expanding						Established
Category	The Phiippines	Vietnam	India	Indonesia	Pakistan	Malaysia	Hong Kong	Thailand	Singapore	Australia	New Zealand	South Korea	Taiwan	Japan
Patient advocacy for CGM	Patient advocacy for CGM is not publicly available/ visible.	Patient advocacy for CGM is not publicly available/ visible.	Presence of patient advocacy, such as the Blue Circle Diabetes Foundation, has advocated for the availability of affordable CGMs, but there are no mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes.	Patient advocacy for CGM is not publicly available/ visible.	Presence of patient advocacy; there is advocacy for the availability of affordable CGMs, with mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes. The PAG,Meethi Zindagi, has successfully worked with the government previously to achieve some insulin support for select low-income populations.	Presence of patient advocacy; there is advocacy for the availability of affordable CGMs, with mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes through focus group discussions	Presence of patient advocacy, such as YDA which has advocated for the availability of affordable CGMs. There is also charitable funding for CGMs set up by public academic institutions, medical associations, and patient groups	Presence of patient advocacy; there is advocacy for the availability of affordable CGMs, with mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes through focus group discussions. The Diabetes Association of Thailand has played a key role in securing funding for specific T1D populations.	Presence of patient advocacy which has advocated for the availability of affordable CGMs, but there are no mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes. Past advocacy was done through platforms such as newspaper forums, which has advocated for the availability of affordable CGMs.	Presence of patient advocacy; there is advocacy for the availability of affordable CGMs, with mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes. Strong advocacy efforts by patient and professional groups have contributed to expanded CGM coverage.	Presence of patient advocacy; Strong advocacy for the availability of affordable CGMs led by Diabetes New Zealand, with active involvement from patients, clinicians, and whānau, has helped embed patient voices in Pharmac's decisions and contributed to the 2024 expansion of CGM coverage for people with T1D.	Presence of patient advocacy which has advocated for the availability of affordable CGMs, but there are no mechanisms for payers to consider patient perspectives in reimbursement decision making for diabetes. PAGs in South Korea often lack awareness of, or experience frustration with, the decision-making processes related to reimbursement.	No available information, there is likely advocacy for the availability of affordable CGMs, with patient voice increasingly included in reimbursement decision making processes	No available information, there is likely advocacy for the availability of affordable CGMs. Japan's PMDA has established a Patient Centricity Working Group that works with patient groups to incorporate patient perspectives into medical device development, approval, and reimbursement processes.
Diabetes registry	Regional and hospital-based diabetes registries have been developed, such as the DISCOVER-Philippines Registry, which collect a range of data including patient demographics, medical history, physical measurements, lifestyle factors, and laboratory results.	No diabetes registry publicly accessible in the country	Regional clinical-based diabetes registry has been developed, the ICMR-MDRF Diabetes Biosamples Cohort, which collects a range of data including patient demographics, diabetes subtype, comorbidities and clinical measures.	National registries have been developed, such as the Indonesia National Registry and Indonesian Pediatric Society registry, which collect a range of data including patient demographics, prescriptions and clinical measures.	A national registry is being developed, DROP project, which collects a range of data including patient demographics, diabetes subtype, prescriptions, screening results and clinical measures.	The national diabetes registry is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	The national diabetes registry, Hong Kong Diabetes Register (HKDR) is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	A national registry has been developed, the Thai-Type 1 Diabetes and Diabetes Diagnosed Age Before 30 Years Registry, Care, and Network (T1DDAR CN), which collect a range of data including patient demographics, prescriptions, screening results, hospital admission records and clinical measures.	The national diabetes registry, SingHealth Diabetes Registry (SDR), is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	The national diabetes registry, National (Insulin-Treated) Diabetes Register (NDR), is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	The national diabetes registry, Virtual Diabetes Register (VDR), compiles data from public hospital discharges, outpatient visits, pharmaceutical dispensing, and laboratory results to estimate national diabetes prevalence. However, it lacks key details such as diabetes subtype and may underrepresent individuals not enrolled in primary care.	The national diabetes registry, collected through the Korea National Health and Nutrition Examination Survey (KNHANES), is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	The national diabetes registry, Taiwan Diabetes Registry (TDR), is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.	The national diabetes registry, Japan Diabetes Comprehensive Database Project Based on an Advanced Electronic Medical Record System (J-DREAMS), is comprehensive, capturing data such as patient demographics, diabetes subtype, comorbidities, clinical measures, prescriptions, screening results, and hospital admission records.
Reimbursement of SMBG	No SMBG eimbursement	No SMBG reimbursement	No SMBG reimbursement	No SMBG reimbursement	No SMBG reimbursement	No SMBG reimbursement	No SMBG reimbursement	Full coverage for specific groups, particularly those with T1D, gestational diabetes, and select T2D patients based on clinical judgment	Subsidised rates are offered as a result of group purchasing across all restructured hospitals	Full coverage for T1D and T2D (who use insulin), partial coverage for T2D who do not use insulin	Generally subsidised for insulin-treated individuals, including most with T1D and some with T2D. However, for those with T2D not using insulin, SMBG supplies are not routinely funded and may need to be self-funded.	Partial coverage for T1D patients, GDM patients	Full coverage for T1D patients	Full coverage for individuals with diabetes who use insulin
Reimbursement of CGMs	No CGM reimbursement	No CGM reimbursement	No CGM reimbursement	No CGM reimbursement	No CGM reimbursement	No CGM reimbursement	No CGM reimbursement	Partial coverage (depending on the lump sum amount that month) for T1D and gestational diabetes patients under 30 years old	Subsidised rates for T1D individuals who struggle with glycemic control	Full coverage for individuals under 21 with T1D and for those aged 21 or older with a valid concessional status. Partial coverage, requiring a co-payment, is available for other T1D individuals.	Full coverage for T1D individuals	Partial coverage for T1D patients, with recent expansion in coverage for pregnant women with gestational diabetes on insulin.	Partial coverage for T1D patients, with recent expansion in coverage for pregnant women with gestational diabetes on insulin.	Full coverage for individuals (both T1D and T2D) with diabetes who use insulin at least once daily.

OTHER CASE STUDIES

This section presents case studies from the **UK**, **Singapore**, and **Thailand**, offering practical examples for accelerating CGM reimbursement. While these systems are still evolving and refining their approaches, they provide valuable insights into key factors such as clinical evidence, national priorities, stakeholder engagement, and funding models. These examples can guide other regions looking to explore or enhance CGM reimbursement, with lessons that can be adapted to different contexts and priorities.

Thailand

Thailand's experience with CGM reimbursement began with a targeted approach for high-risk groups. Today, CGM is reimbursed for all PLWT1D, regardless of age with a clinical indication- specifically, those whose HbA1c remains above target (<7%), those experiencing frequent or severe hypoglycemia, women with T1D during pregnancy, and those already using CGM who have demonstrated improved glycemic outcomes - allowing for continuous use. KOL interviews highlight that this was driven by strong clinical evidence, alignment with national healthcare priorities, and the establishment of a dedicated diabetes registry as outlined below. The successful integration of CGM into the clinical practice guidelines for diabetes further supported its reimbursement[86]. With the foundation for CGM reimbursement established, the next challenge lies in expanding coverage to more diverse diabetes community groups, particularly those with T2D on intensive insulin therapy.

Drivers	Details
Establishing a diabetes registry	The creation of the Thailand T1D Network and registry played a central role in providing evidence to support CGM reimbursement. The Diabetes Association of Thailand (DMTHAI) obtained funding to establish the registry through the National Health System Research Fund. Research on this data revealed that hypoglycemia led to PLWT1D patient mortality despite the availability of reimbursed insulin and SMBG, which created an impetus to consider CGM reimbursement to address this unmet need.
CGM inclusion in clinical guidelines	International guidelines (e.g. ADA) cited the benefits of CGM in managing hypoglycemia and optimising glycemic control, which laid the groundwork for the Thailand Clinical Practice Guidelines for Diabetes to recommend CGM for T1D in 2023.
Hospitals with diabetes educators	The T1D Network also made it easier to identify hospitals with diabetes educators who could teach and support PwD to use CGM. This information gave payers confidence that reimbursed CGM can be adopted effectively in clinical practice.
Alignment with national priorities	DMTHAI submitted an initial CGM reimbursement proposal for four priority PLWT1D groups – children below seven years old, pregnant women, those who fail to achieve glycemic control or experiencing frequent or severe hypoglycemia. Given the aging population of Thailand, the proposal highlighted the importance of optimising diabetes management of young PLWT1D so that they can achieve their maximum potential.
Establishing the economic benefit of CGM	The NHSO then conducted a HTA for CGM reimbursement in the four priority PLWT1D groups. The positive HTA results led to initial CGM reimbursement in these four priority PLWT1D groups.

Singapore

Singapore's experience with CGM reimbursement began with PLWT1D. This coverage was driven by the widespread adoption of CGM in hospitals, established channels for stakeholder input during formal health technology assessments, government acknowledgment of CGM's benefits, and evidence from international experience. Building on this progress, the next focus for Singapore is to further strengthen advocacy efforts and generate additional local data to support the expansion of reimbursement to other diabetes patient populations.

Drivers	Details
Adoption of CGM in public hospitals through grants	Before CGM reimbursement was established, the clinical community in Singapore recognised its value and actively pursues multiple avenues to improve access for PwD. Public hospitals leveraged available funding sources, such as lump-sum research grants from the MOH and hospital funding sources, to implement programmes offering free/subsidised CGM for PwD. This resulted in the generation of valuable local clinical evidence and drove wider CGM adoption, ultimately supporting subsequent reimbursement decisions.
Established pathways for involving key stakeholder inputs in formal evaluations	Establishing pathways to incorporate stakeholder input was essential in driving CGM reimbursement in Singapore. Each year, the Agency of Care Effectiveness (Singapore HTA agency) invites public hospitals to submit topics, and the clinical community leveraged this opportunity to formally propose subsidising CGM for PLWT1D . Recognising the demand and benefits that CGM could offer for the sub-population, ACE then accepted the reimbursement proposal for formal assessment in 2022[95]. In 2023, ACE also established formal processes to incorporate the community voice within evaluations. The 'lived experience surveys' conducted by ACE allowed TypeOne.sg, the T1D patient group in Singapore, to form one of the loudest voices among diabetes experts consulted in the evaluation. The survey responses highlighted key concerns, offering a more nuanced understanding of the lived experience beyond what could be gathered from traditional clinical KOL consultations. This reinforced the need for CGM and contributed to a compelling case for CGM as an essential component of T1D management.
Recognition of international experiences to address local evidence gaps	The wealth of international evidence available across reference territories complemented the limited local data, leading to positive recommendations for CGM reimbursement in the T1D population. CEA results from NICE and Health Technology Wales were primarily referenced to expedite the confirmation of cost-effectiveness of CGM in adults with T1D. In addition, ACE also recognised that CGM were already reimbursed for T1D populations in key reference territories (e.g. Australia, Canada, Japan, South Korea, UK), which further helped to substantiate the positive recommendation.

United Kingdom

In June 2022, NICE updated its guidelines to recommend that adults with insulin-treated T2D, whose blood glucose is monitored by a care worker or healthcare professional, should be offered CGM[96]. While this marked a significant step forward – resulting in reimbursement coverage for both type 1 and insulin-treated type 2 diabetes - further efforts are still needed in the future to expand access to all individuals with T2D.

Drivers	Details
Alignment with national priorities	The UK government has recognised the increasing prevalence of diabetes, especially T2D, and the potential of CGM to improve management. Diabetes remains a leading cause of premature mortality, doubling an individual's risk of cardiovascular disease, and costing the NHS over £10 billion annually[97]. The NHS Long Term Plan, published in January 2019, prioritised digitalising diabetes care, beginning with CGM access for PLWT1D and later expanding to pregnant women with T1D and insulin-treated T2D. As required by the Health and Social Act, the quality standard was also updated accordingly in March 2023, following a review of clinical guidelines, which reinforced the government's commitment to improving care through advanced technologies[98].
Strong stakeholder advocacy driving CGM access and uptake	Various key diabetes groups, clinical societies, and industry representatives have been instrumental in advocating for broader CGM access, where the NICE draft recommendation in April 2022 considered their submitted inputs[99]. The committee recognised that many PLWT2D patients report a significant impact on their quality of life due to hypoglycemia, resulting in the agreement to reprioritise the use of CGM in those who have large problems with hypoglycaemia (T1D and T2D). Additionally, it was acknowledged that the evidence review did not include studies of non-insulin users. Nevertheless, the use of CGM is anticipated in the non-insulin group as well. Diabetes UK later launched the "Diabetes Tech Can't Wait Campaign" in 2023 to address the disparities in access to diabetes technology. The campaign enhanced the adoption of CGM, with activities such as taking actions to lobby the Members of Parliament, and engaging local Integrated Care Boards (ICBs) to implement policies aligned with national guidelines. These efforts resulted in a further increase in updated CGM policies in England after the campaign launch[100].
Clinical evidence & health outcomes to expand CGM reimbursement	Based on NICE's economic modelling for isCGM use in PLWT2D in 2021, it was found to be cost-effective compared to SMBG. The results were noted to be directly applicable only to insulin-treated PLWT2D, given that the effectiveness data were based on a single study involving T2D adults on insulin therapy. The resource impact of the reimbursement expansion was also deemed manageable, where NICE projected that approximately 50,000 people living with T2D would be eligible for CGM by 2026/2027[101,102]. The 2023 NICE quality standard was updated to further emphasise that CGM could significantly improve glycemic control in insulin-treated PLWT2D[103]. Following the updated guidance, a budget impact analysis revealed that while CGM led to increased spending within the NICE-eligible T2D cohort, it resulted in a net reduction in overall healthcare activity[90]. Specifically, there was a decrease of approximately 20,000 healthcare attendances, primarily due to fewer episodes of severe hypoglycemia and diabetic ketoacidosis.