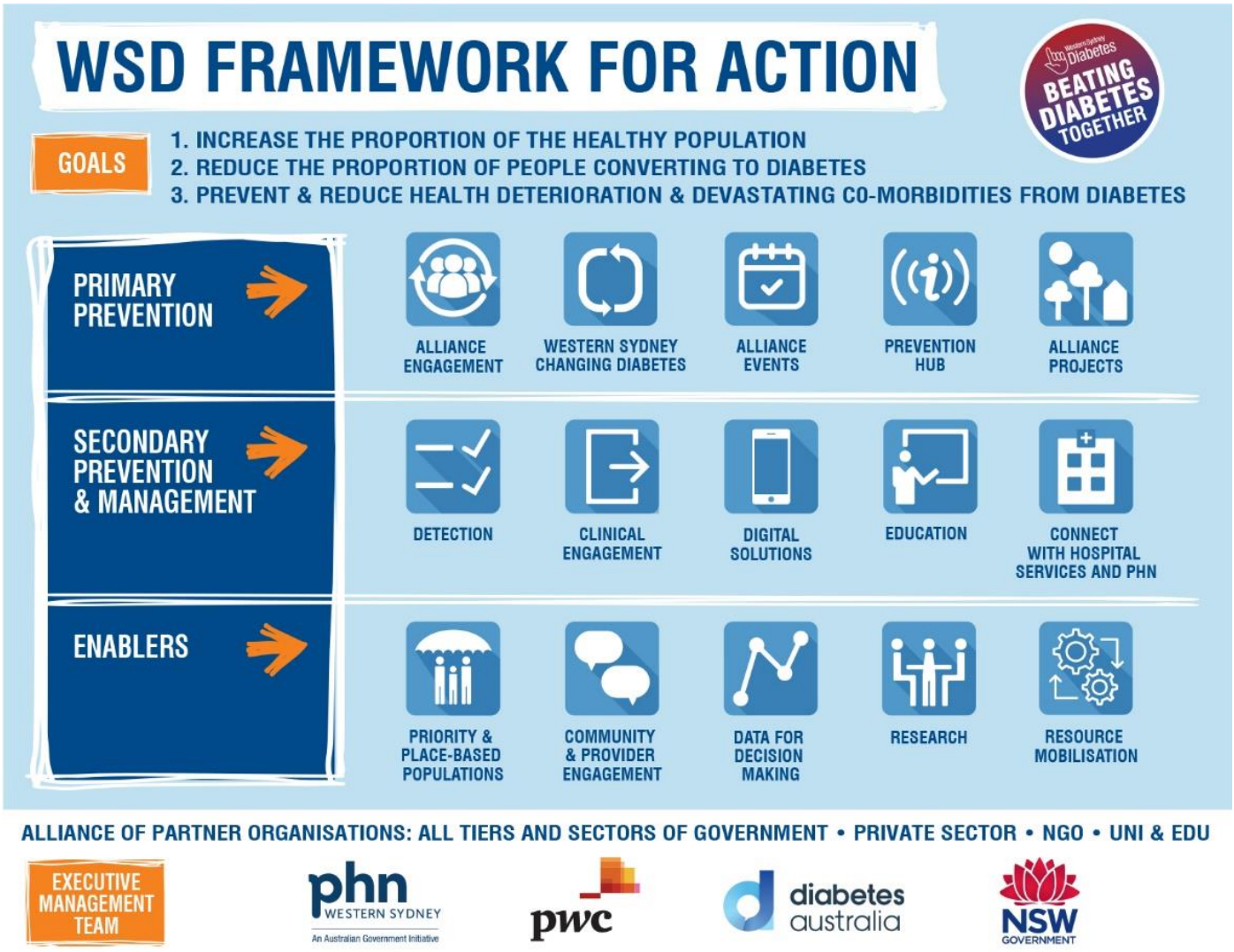
Response to Australian Parliamentary Enquiry into Diabetes – July 2023

Prof Glen Maberly, Director, Western Sydney Diabetes

I would like to express my gratitude for the opportunity to submit a response to the Australian Parliamentary Inquiry into Diabetes. The global and national prevalence of diabetes has reached alarming levels, and this crisis is particularly pronounced in western Sydney. Therefore, we appreciate the relevance of this inquiry to Western Sydney Diabetes[1] (WSD).

WSD was established in 2014 within Western Sydney Local Health District (WSLHD). What sets WSD apart is its unique leadership by five organisations: WSLHD, Western Sydney Primary Health Network (WSPHN), NSW Department of Planning and Environment (DPE), Diabetes Australia, and until recently PwC. We have formed



an active alliance comprising over 140 partner organisations from various tiers and sectors, including government, the private sector, education, and NGOs, all working collectively to support the achievement of our goals. WSD has a dedicated and highly skilled core team[2] of 15 individuals whose primary responsibility is

[1] Western Sydney Diabetes https://www.westernsydneydiabetes.com.au/
[2] WSD Core team https://www.westernsydneydiabetes.com.au/about-us/the-core-team/

to implement our program alongside our partners. With an annual budget of approximately $2.5 million, we focus on both primary prevention and enhanced management strategies to combat diabetes effectively.

The WSD Framework for Action forms the foundation of our work and encompasses three main sections: Primary Prevention, Secondary Prevention and Management, and Enablers. Each section comprises five key activities that guide our efforts in addressing diabetes effectively.

To ensure a systematic approach, WSD develops an annual implementation plan, utilising the available resources to support the goals outlined in the framework. We closely monitor our progress and achievements, providing detailed reports in our annual Year in Review publication. These reports, along with various supporting documents[3], can be accessed through our website, offering comprehensive insights into our initiatives.

Considering this framework, I would like to draw the committee's attention to several key issues that warrant discussion and consideration. These issues encompass vital aspects of diabetes prevention, management, and the enablers that support our endeavours. **We have provided several key recommendations at the end of this submission as a way forward to bending the cost curve associated with diabetes, leading to improved health outcomes in Western Sydney and beyond.**

The Magnitude of the Problem

Diabetes is larger and more time critical problem than most Australians appreciate.

The Australian Diabetes Map[4], a national monitoring tool developed by NDSS and Diabetes Australia, provides valuable insights into diabetes prevalence across the country. According to the data derived from the NDSS Registrant database, the Blacktown Local Government Area (LGA) exhibits a diabetes prevalence of 7.5%, surpassing the national rate of 6.1%.

To gain a deeper understanding of the situation, we implemented a comprehensive detection program at Blacktown and Mt Druitt hospital Emergency Departments (ED) over six years. When blood tests were done in adults, we included the measurement of HbA1C levels. The results revealed that 18% of individuals had HbA1C levels indicative of diabetes (HbA1C > 6.5%), while 30% displayed an increased risk of developing diabetes (HbA1C 5.7-6.4%)[5]. Notably, approximately 22% of adults admitted to these hospitals had diabetes. It is important to highlight that patients with diabetes incur 1.7 times higher costs and experience longer hospital stays compared to those without diabetes.

To further validate these findings, we replicated the detection program in 11 GP medical centres throughout the WSLHD catchment. The results mirrored the high rates of pre-diabetes (30%) and diabetes (18%) observed in the EDs[6]. Additionally, data from over 200 General Practices shared with the Western Sydney PHN indicated that, on average, 8.6% of adults within their clinical records had been diagnosed with diabetes. This suggests a gap of approximately 10% of individuals who remain undiagnosed, representing a missed opportunity for early detection and management. Early intervention and effective diabetes control are crucial in preventing long-term complications associated with the disease.

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[3] WSD Resources, https://westernsydneydiabetes.com.au/resources/

[4] Australian Diabetes Map https://www.ndss.com.au/about-diabetes/diabetes-facts-and-figures/australian-diabetes-map/

[5] Tien-Ming Hng, Amanda Hor, Sumathy Ravi, Xiaoqi Feng, Jaime Lin, Thomas Astell-Burt, David Chipps, Mark Mclean, Glen Maberly; *Diabetes case finding in the Emergency Department using HbA1c: An opportunity to improve diabetes detection, prevention and care.* BMJ Open Diabetes Research and Care 2016; 4:e000191. doi:10.1136/bmjdrc-2015-000191.

[6] Gideon Meyerowitz-Katz, Shanthini Seelan, Pankaj Gaur, Rona Francisco, Shahana Ferdousi, Thomas Astell-Burt, Xiaoqi Feng, Stephen Colagiuri, Glen Maberly, Tien-Ming Hng; (2019) *"Detecting the hidden burden of pre-diabetes and diabetes in Western Sydney",* Diabetes Research and Clinical Practice, doi: https://doi.org/10.1016/j.diabres.2019.04.019

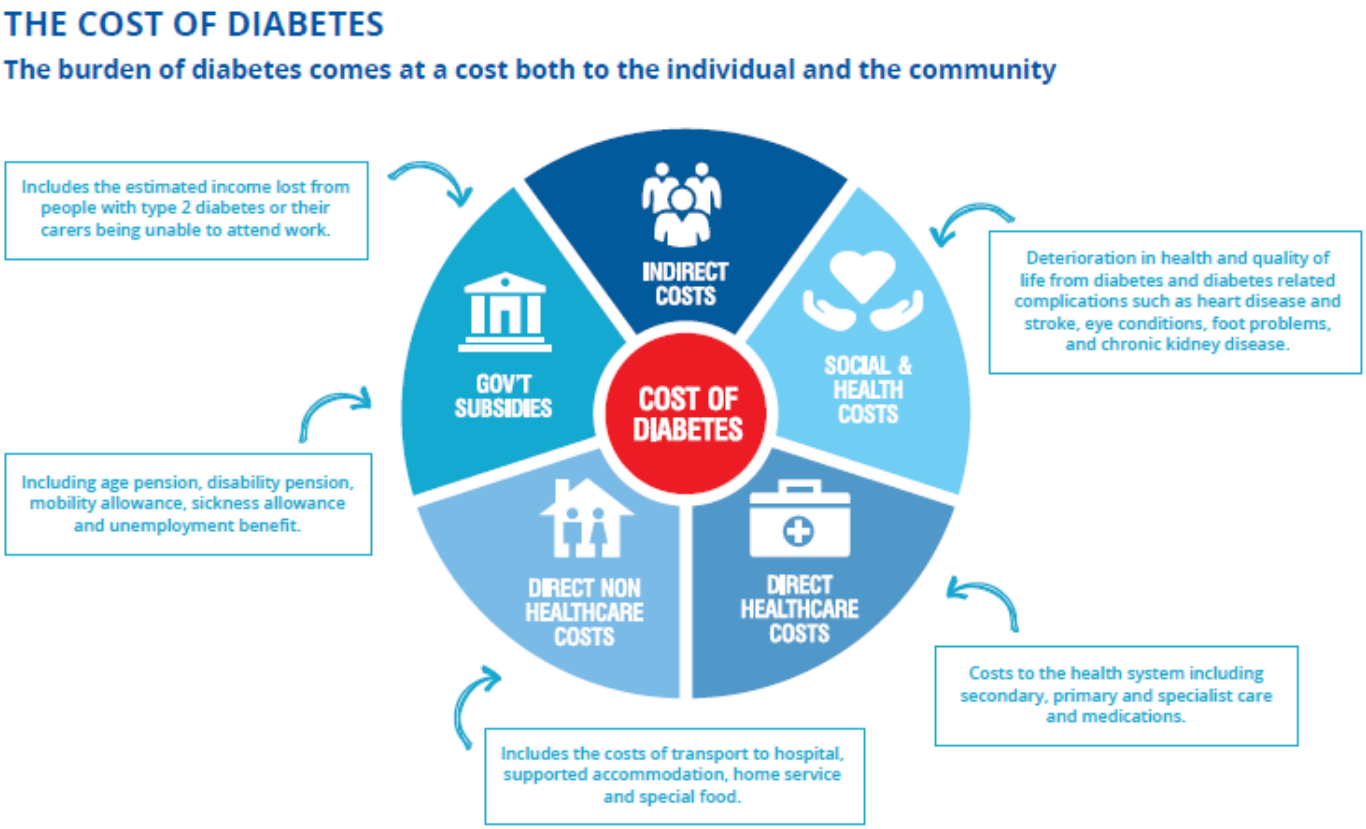
As part of our new community-focused initiative called *Western Sydney Changing Diabetes*, we recently conducted a detection program among patrons of the Workers Lifestyle Group's Workers Blacktown club. The results yielded a similar pattern and intensity of findings as those observed in GP clinics and the hospital setting, reaffirming the significance of the issue.

Our original diabetes prevalence data indicates that living in Western Sydney poses a doubled risk of developing diabetes compared to living in the eastern or northern Sydney suburbs[7]. This observation aligns with more recent data from NSW Health, which reports a 13% prevalence of diabetes among adults living in WSLHD[8].

The data presented highlights the urgent need for targeted interventions and comprehensive management strategies to address the diabetes hot spot that is Western Sydney. By recognising the gravity of the situation and implementing proactive measures, we can work towards reducing the burden of diabetes within our community.

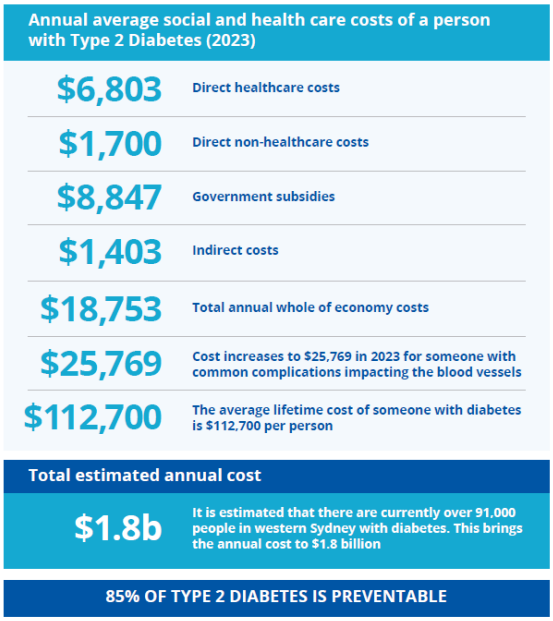
Investment Opportunity – Cost Benefit Estimates

WSD worked closely with PwC on estimating the costs of diabetes in our part or Western Sydney.[9]



[7] Astell-Burt, Xiaoqi Feng, Gregory S. Kolt, Mark McLean, Glen Maberly. *Understanding geographical inequities in diabetes: Multilevel evidence from 114,755 adults in Sydney, Australia,* Diabetes Research and Clinical Practice 106 (2014) e68 – e73, 2014
[8] HealthStats NSW. NSW Health, https://www.healthstats.nsw.gov.au/#/home
[9] Investment Opportunity: Primary Prevention https://www.westernsydneydiabetes.com.au/uploads/2023/06/WSD_Cost-Benefit-Analysis-2023.pdf

In 2023 WSD revised its *Investment Opportunity: Primary Prevention*[10]. This outlined that for a very modest outlay of $20M, 8 evidence supported prevention programs in our part of western Sydney could return a benefit of $540M.



In 2016, WSD developed an Investment Opportunity focused on Secondary Prevention and Management, which was supported by a robust economic case demonstrating substantial financial and non-financial net benefits achievable through our program[11]. Based on the analysis at that time, an investment of $98.7 million over eight years could yield a net financial benefit of $138.8 million. Since then, our model of care has further improved, suggesting that if the analysis were repeated today, we would likely demonstrate even more significant benefits.

Back in 2016, we engaged in discussions with the federal and state Ministries of Health and Treasuries, generating interest in our program. However, due to changing election cycles, the investment discussions were not pursued further. WSD is keen to reopen these discussions and explore potential investments. At the time, it was believed that the Federal Government might be interested in investing in WSD, as well as other programs in different jurisdictions across Australia, to serve as demonstration sites showcasing the achievable outcomes that could be expanded nationally.

In 2018, the Australian Government Productivity Commission published its report titled *Healthier Australians: Shifting the Dial*[12]. This report discussed various strategies for improving healthcare and estimated that investments in Integrated Care, Patient-Centered Care, Funding for Health, Quality of Health, and Using Information Effectively could conservatively yield benefits exceeding $8.5 billion over five years. Within this extensive report, WSD was cited as an example of a regionally located program with care models that could deliver such benefits. The report proposed redirecting health financing towards innovation and outcomes, suggesting that funding pools for Local Hospital Networks and Primary Health Networks be allocated for preventative care and the management of chronic conditions at the regional level. This approach would grant greater autonomy, by devolving centralized funding, to develop regional solutions, resulting in improved health outcomes, reduced hospitalisations, and decreased costs. The report further emphasised the need for experimentation, innovation, and tailored solutions that cater to specific regional communities.

In light of the Productivity Commission's report, WSD aligns with the recommended approach, emphasising the importance of regional investment in healthcare. We believe that by adopting this approach, fostering innovation, and tailoring solutions to specific regional contexts, we can achieve better health outcomes, reduce healthcare costs, and enhance the well-being of the community.

[10] Investment Opportunity: Primary Prevention https://www.westernsydneydiabetes.com.au/uploads/2023/06/WSD_Cost-Benefit-Analysis-2023.pdf
[11] Investment Opportunity: Secondary Prevention and Management https://westernsydneydiabetes.com.au/uploads/2022/09/WSD_Invest_SecondaryPrevention.pdf
[12] Shifting the dial article https://www.pc.gov.au/media-speeches/articles/healthier-australians

Primary Prevention

In 2018, following a series of collaborative workshops involving partners from various sectors, we identified and selected 23 prevention interventions that were supported by evidence-based outcomes. These interventions formed the basis of our *Beating Diabetes Together Prevention Strategy*, which outlined the local achievements we aimed to accomplish across four key themes[13]. It became evident during this process that the responsibility for prevention extends beyond the healthcare sector and is intertwined with broader sustainable living goals, where health benefits are just one aspect of the overall dividends.

Within this context, WSD plays a vital role in convening partners from diverse sectors and providing crucial epidemiological data that highlights the magnitude of the problem and the potential benefits of implementing the identified interventions. By fostering collaboration and leveraging the expertise of various stakeholders, we aim to drive effective primary prevention initiatives that go beyond traditional healthcare settings, ensuring a comprehensive and sustainable approach to tackling diabetes in our community.

Western Sydney Changing Diabetes

In December, we proudly launched *Western Sydney Changing Diabetes* (WSCD), a five-year public-private partnership between WSD, Workers Lifestyle Group (WLG), and Novo Nordisk, with a focused mission to address diabetes in western Sydney. The WLG Board demonstrated its commitment by investing $500,000 over five years to implement the program, providing substantial financial support. Moreover, through this partnership, WSD gains access to the extensive membership base of the WLG, consisting of approximately 53,000 individuals, many of whom are either at risk of or already living with diabetes. This opens up avenues for targeted interventions and support within the community.

The collaboration between WSD, WLG, and Novo Nordisk will also extend its reach by engaging with other stakeholders, including our esteemed Alliance partners. By working closely with these partners, we aim to ensure that diabetes and overall well-being remain top priorities for local and state bodies, fostering a comprehensive approach to addressing the issue.

By joining Novo Nordisk's global network of 'Cities Changing Diabetes,' our partnership gains access to a vast network of over 160 local partners worldwide. This global collaboration has already contributed to more than 50 research studies and over 40 health promotion and diabetes prevention projects[14]. Being part of this network provides valuable opportunities for knowledge sharing, learning from best practices, and collaborating on innovative solutions.

The launch of WSCD took place on December 8 at Workers Blacktown, with esteemed local politicians, and Blacktown Mayor attending. Their presence and support underscored the significance of this partnership in the fight against diabetes in western Sydney.

Furthermore, on June 19, 2023, our Alliance partners convened to plan the *Lose 2kg Campaign*—an exciting and dynamic initiative focused on combating diabetes through weight loss and lifestyle modifications within the Western Sydney community. This campaign aims to raise awareness, provide resources, support and empower individuals to make positive changes in their lives.

The collaboration between WSD, WLG, Novo Nordisk, and our Alliance partners demonstrates our collective commitment to addressing the challenges posed by diabetes in western Sydney. By combining resources,

[13] Beating Diabetes Together Prevention strategy https://www.westernsydneydiabetes.com.au/uploads/2022/06/WSD-prevention-strategy-2016-WEB.pdf
[14] Cities Changing diabetes https://www.citieschangingdiabetes.com/

expertise, and community engagement, we strive to make a meaningful impact on diabetes prevention and management in the region.

The campaign adopts a multifaceted approach that mobilises partners, engages communities, and utilises a robust strategy framework to combat diabetes in Western Sydney[15].

Mobilising Partners: The campaign actively seeks collaborations across various sectors, including health, community, food and activity sectors. By partnering with health organisations, social groups, food suppliers and activity coordinators, we can leverage diverse capabilities and resources, creating a powerful alliance against diabetes.

Unified Engagement: By interconnecting different sectors, we create a comprehensive network that fosters a health-forward environment conducive to lifestyle changes. This approach ensures that individuals and organisations work together towards a common goal, maximising the impact of our efforts.

Embracing Health: The campaign encourages individuals in Western Sydney to embrace a health-forward lifestyle through personal or collaborative engagements. This includes setting health goals, cultivating healthy habits, monitoring progress and actively involving the community. By promoting a positive and supportive environment, we empower individuals to take charge of their health.

Finding Our Champions: The campaign integrates celebrity champions and advocates to amplify its visibility and influence. Sports personalities, entertainers, medical professionals, chefs, fitness advocates and cultural leaders are among the potential champions who can inspire and motivate individuals to make positive changes.

Communication Strategy: The campaign employs a comprehensive communication strategy that blends professional public relations guidance with grassroots engagement. This ensures consistent messaging that is both unified and tailored to specific audiences, maximising the campaign's reach and impact.

Intervention Strategy: The campaign utilises a multi-tiered approach, including programs offered by the WSLHD, WLG, engagement through General Practice, and collaborations with sporting organisations. This comprehensive strategy targets various aspects of diabetes prevention and management, allowing for a more holistic approach.

Data Gathering Strategy: The campaign emphasises the collection of data to evaluate and refine its impact. The data collection focuses on process measures, impact measures, cost measures and qualitative measures, enabling a comprehensive assessment of the campaign's effectiveness. It has demonstrated global best practice in terms of the quantification of impacts and evidence-based decision making.

Program Management Strategy: A dedicated Leadership Group guides the campaign's strategy, focus, and scope, while organisations maintain autonomy in managing their respective domains. This collaborative approach ensures effective program management while allowing for flexibility and innovation.

Together, these elements synergize to drive the campaign towards its ultimate goal of fostering a healthier Western Sydney and reducing the risk and impact of diabetes through community engagement and collaboration.

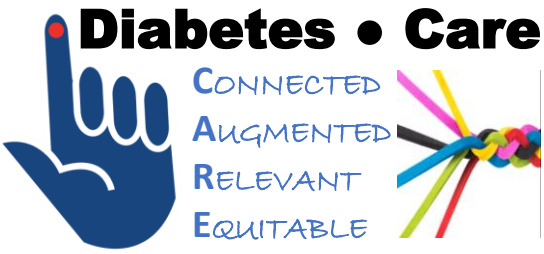
On June 28, 2023, Blacktown MP, moved a motion in the NSW Parliament (for future debate if time allows in Parliament), acknowledging the diabetes “hotspot” status of Western Sydney. The motion also recognises that community-initiated solutions, supported by government agencies, community, and business organisations, are key to addressing this issue. The collaboration between WSD, WSLHD, Novo Nordisk, Workers Blacktown and

[15] Lose 2kg Planning our campaign https://westernsydneydiabetes.com.au/uploads/2023/07/Glen-Maberly-Lose-2kg-Campaign-Presentation.pdf

WentWest (WSPHN) is commended for their joint efforts in launching a new diabetes initiative, with gratitude expressed to the Minister for Health for his interest.

This presents an opportunity for the state and federal governments to align and work together on preventing and better managing diabetes in Western Sydney. By joining forces, we can amplify the impact of our efforts and create a lasting positive change in the community that can be a blueprint for other regions.

Secondary Prevention and Management



WSD has recently prepared a draft document that reviews and describes the distinctive care model adopted to address the pressing issue of diabetes in Western Sydney, where the prevalence rate stands at 13% (ref available on our website). This document consists of three sections, starting with the foundational principles, delving into the existing model, and concluding with a visionary outlook on potential future expansions.

At WSD, we embrace a holistic approach to confront diabetes, focusing on early detection, empowering high-risk communities, and enhancing the skills of general practitioners and community healthcare providers. We place special emphasis on improving health outcomes for the First Nations populations and individuals from diverse cultural backgrounds, who face an increased risk of type 2 diabetes.

To extend our reach, WSD implements an outreach blueprint that encompasses virtual symposiums, direct engagement with general practitioners, and instructional masterclasses, prioritizing collaboration and partnerships. As part of our commitment in public health, we offer our services free of charge, even in the face of challenges such as last-minute cancellations.

The WSD model of care adopts a multifaceted approach, including patient referrals, thorough preparations prior to the virtual Diabetes Case Conference (DCC), and robust support following the conference. Continuous Glucose Monitoring (CGM) plays a pivotal role in the preparatory phase. Post-DCC efforts involve providing nutritional guidance and tailored appointments with dietitians, resulting in positive outcomes such as improved glycemic control and a reduction in hypoglycemia episodes. However, areas such as Exercise Physiology and Psychology highlight potential areas for further development.

Digital technology plays a significant role at WSD, with a wealth of educational content comprising 100 patient videos and an additional 30 videos for general practitioners. Thoughtful data collection is essential for the continuous evaluation and refinement of our care model, and strategic alliances are indispensable for its success.

Looking ahead, WSD is committed to adopting a dynamic approach to diabetes management. This involves expanding our network of professionals, enhancing digital communication channels, and exploring the potential of artificial intelligence for anticipatory healthcare. We are also focused on optimising data collection and archiving processes while seeking investment opportunities to establish a pioneering national standard in diabetes care.

The vision of WSD extends beyond the present, as we strive to lead the way in innovative diabetes care and create a lasting impact on the health and well-being of the Western Sydney community.

Diabetes Case Conference (DCC)

A key element of WSD's initiative is the DCC model. DCCs are conducted virtually using the NSW Health myVirtualCare platform. While the patient and carer are typically situated with the GP, they can also

participate from home or the clinic alongside the specialty team. The use of video allows for improved communication, surpassing audio-only interactions, and enables all participants to view the CGM reports provided by Abbott Pty Ltd through the Libre View platform. The specialty team consists of an Endocrinologist

or AT Endocrine Register and a Diabetes Educator, with the potential inclusion of the WSD dietitian as needed and available. Although there is a new Medicare Benefits Schedule (MBS) item listing for community allied health professionals, such as private dietitians, to join upon the GP's request, this listing is yet to be activated.

While DCCs are typically scheduled for 45 minutes, the actual duration tends to be around 30 minutes, accounting for the waiting time for all participants to join the session. Despite this, these sessions prove to be remarkably productive, allowing for thorough examination of CGM reports and facilitating agreement on management plans, including adjustments to medication and lifestyle changes.

In WSD's Year in Review report for 2022, we highlighted that across the six types of clinical sessions provided by WSD, there were nearly 1600 encounters. GPs were present 45% of the time. It is worth noting that we only request GPs to participate in the first and final DCCs. Since the introduction of the WSD DCC, we have engaged with over 600 different GPs, showcasing the wide reach and acceptance of this model of care.

During a celebratory dinner recently held at the Workers Blacktown, over 100 individuals gathered to recognise and commend 45 GP practices that have shown strong commitment to utilising the DCC model of care. More than 60 GPs who attended the event endorsed our model and spoke passionately about its virtues.

However, one of the challenges we face is reaching out to those who have not yet embraced this innovative approach. For instance, there is a practice in Mt Druitt, which has the highest rates of diabetes, that referred over 100 patients to our service in the last 12 months. Unfortunately, the lead doctor and owner of the practice does not allow the GPs the time to participate in DCCs as they claim there is no economic incentive. Consequently, there is no learning and patients in this practice are not receiving the necessary management, resulting in inappropriate medication use, inadequate lifestyle coaching, and a high rate of complications. This situation highlights the need for Medicare reforms that provide incentives for practices to allocate time for learning and prioritise quality outcomes over the volume of consultations.

Likewise, there are currently no financial incentives for endocrinologists working in private practice to allocate the necessary time for adopting the DCC model of care. It is more convenient for them to conduct business through the traditional method of sending and receiving referral and consultation letters. If we expect this change to be widely and extensively adopted, it is crucial to adjust the existing financial incentives.

By revising the incentives, we can encourage endocrinologists in private practice to actively participate in DCC and dedicate the time needed to engage in collaborative care with general practitioners and other healthcare providers. This will facilitate a more integrated approach to diabetes management and lead to improved outcomes for patients.

To ensure the widespread adoption of the DCC model and the benefits it brings, it is essential to address the financial aspects and create a framework that rewards and supports the efforts of all healthcare professionals involved. This may involve revisiting reimbursement structures, considering performance-based incentives, and fostering a culture that values collaboration and quality care.

By incentivising endocrinologists and other specialists in private practice to embrace the DCC model, we can create a more cohesive and patient-centered healthcare system that effectively addresses the challenges posed by diabetes. Collaboration between government bodies, professional organisations, and healthcare providers is vital to making these necessary adjustments and driving the adoption of integrated care on a larger scale.

Based on a large dataset provided to WSPHN, we know that half of the patients with type 2 diabetes have HbA1C levels above 7%. Many of them have been on inappropriate medication for years. However, after just a single joint consultation with our team, lasting half an hour, we have observed a reduction in HbA1C levels by 0.8%. With full engagement over several sessions, we have achieved a remarkable HbA1C drop of 1.6%. These outcomes demonstrate the potential of integrated care through DCC.

To make DCC the norm rather than the exception, it is crucial to incorporate incentives for integrated care into the Medicare system. This will encourage practices to participate in DCC, ensuring that patients receive comprehensive and effective management. By aligning economic incentives with quality outcomes, we can enhance the overall care provided to patients with diabetes and reduce the burden of complications.

Addressing these challenges and implementing necessary reforms will require collaboration between government bodies, health organisations, specialty and general practice providers and community stakeholders. By working together, we can create a system that incentivises practices to prioritise learning, collaboration, and quality care, ultimately leading to improved outcomes for patients with diabetes

Recognising the limited availability of endocrinology and diabetes expertise in rural settings, WSD has actively collaborated with Western NSW and Southern NSW LHDs to explore the potential benefits of implementing the DCC model in these regions. Our initial pilot programs have shown promising results, indicating that the DCC model could be highly beneficial in these rural areas. However, it is crucial to address the existing limitations, particularly the lack of funding support for WSD to assist rural communities.

To expand the reach of the DCC model and provide much-needed support to rural communities, WSD is actively seeking grants and funding opportunities. These grants would enable us to extend our services and expertise to these underserved regions, ensuring that individuals living in rural areas have access to quality diabetes care and management.

By securing the necessary funding, WSD aims to bridge the gap in diabetes care between urban and rural communities, fostering equitable access to essential healthcare services. The expansion of the DCC model into rural settings holds significant potential for improving health outcomes and reducing the burden of diabetes in these underserved areas.

WSD remains committed to pursuing partnerships, collaborations, and grant opportunities that can facilitate the implementation and sustainability of the DCC model in rural communities. Through these efforts, we strive to address the unique challenges faced by individuals living in rural areas and provide them with the support they need to effectively manage their diabetes.

Continuous Glucose Monitoring (CGM)

The utilisation of CGM has been instrumental in the diabetes management efforts of the WSD clinical team. Over the past four years, we have implemented CGM on patients with type 2 diabetes (T2D) referred by GPs to our specialised clinics at Blacktown Hospital, with over 3000 instances of CGM usage. We have witnessed the profound insights it provides and the positive behaviour changes it elicits in patients as they learn to take more control of their diabetes. It has become an invaluable tool in effectively managing diabetes.

In collaboration with Abbott, we have conducted training sessions for GPs and Practice Nurses to learn how to apply and interpret CGM results for improved diabetes management. During the COVID-19 lockdown period, we identified four Pharmacies willing to apply CGMs, which proved to be effective. Additionally, some patients participate in group sessions at the hospital, receiving CGM application assistance and DCC support.

Preliminary results from an audit conducted in 2023, incorporating CGM usage, have demonstrated significant improvements. The average HbA1C reduced from 10.1% to 8.5%, the mean glucose management indicator decreased from 8.8% to 6.8%, and the mean time in range improved from 39.4% to 74.7%. Notably, incidences of overnight hypoglycemia and other episodes of very low blood glucose were eliminated, and the average total daily insulin dose decreased.

Comparing the results of pre-COVID face-to-face DCCs, which were one-time events without the benefit of CGM, the average HbA1C drop was 0.8%. However, with the current DCC enhancements and management, the average HbA1C drop has increased to 1.6%.

In our clinic, a 75-year-old man recently shared his experience of gaining insight into his diabetes for the first time while wearing a CGM. This motivated him to exercise more and adjust his eating patterns over the course of two weeks. His time in range improved during this period, allowing us to reduce his insulin dosage by 30%. We provided him with another CGM for the subsequent two weeks to further fine-tune his management. This case exemplifies the remarkable clinical outcomes we have achieved with our patients.

At the recent American Diabetes Association Congress, the use of CGM in T2D was prominently featured, with similar reported findings and observations to what we have observed. The global consensus is that CGM is a good investment, with funding available for T2D in comparable developed countries including France, Canada and the UK. These countries have already funded T2D requiring insulin, with some of the following outcomes:

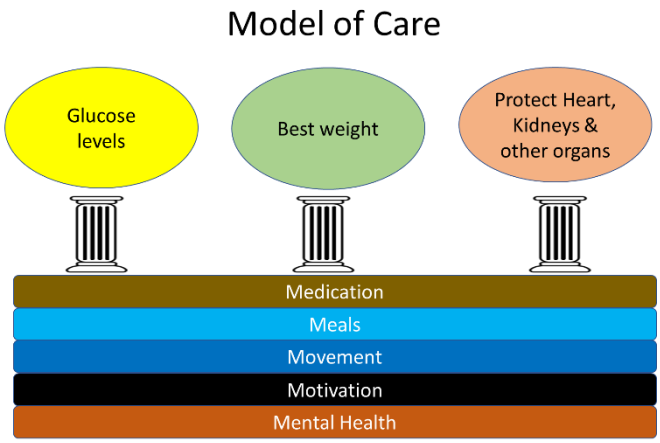
- An extensive retrospective study using the French exhaustive nationwide reimbursement claims database in T1D (n = 33,203) and T2D (n = 40,955), found that FreeStyle Libre was associated with a marked decrease in hospitalisation for DKA by 52% for T1D and 47% for T2D. [16]

[16] Roussel et al. Important Drop in Rate of Acute Diabetes Complications in People With Type 1 or Type 2 Diabetes After Initiation of Flash Glucose Monitoring in France: The RELIEF Study. Diabetes Care. 2021 Jun;44(6):1368-1376.

- A Canadian retrospective real-world chart review from six diabetes centers evaluated the change in HbA1c in adults with T2D (n=91) who initiated CGM. After 3-6 months of use, FreeStyle Libre was associated with 0.8% HbA1c reduction regardless of age, BMI, insulin use duration, or sex.[17]

We urge the government to fund CGM for all patients with T2D. In particular, FreeStyle Libre CGMs could be considered as a low-cost option compared with more expensive and complex T2 medicine regimens.

Medical Management of Diabetes



In the medical management of diabetes, the focus has shifted beyond blood sugar levels alone to encompass achieving optimal weight for patients and mitigating comorbidities. However, it is still observed that many GPs continue to prescribe older medications such as Sulfonylureas, which can lead to weight gain and hypoglycemia.

Fortunately, the availability of GLP-1 analogue injections and oral SGLT medications presents an opportunity to assist patients in weight loss and organ protection. However, there has been a shortage of GLP-1 weekly injections, causing distress and necessitating more frequent consultations for diabetes management over the past year. The traditional approach of stepwise addition of medications is no longer considered effective in diabetes management. Therapeutic inertia, characterised by the slow adjustment of medication by both patients and GPs, is widely recognised as the primary reason for the development of devastating comorbidities.

We acknowledge that the cost of medications has become a concern for governments. However, there are now highly powerful single, dual, and triple GLP-1/GIP/Glucagon Agonists available or soon to be available in the US and European markets. The latest triple agonist, Retatrutide, showcased at the US meeting, demonstrated an average body weight reduction of 25% and the potential to induce remission in long-standing obese patients with diabetes. These medications are expensive, with Trizepatide costing AUD$1000 per month in the US and not yet available here. The combined bargaining power of Medicare is expected to significantly reduce this cost, as it is crucial for Australia to have access to these remarkable medications. However, there is a risk that due to constrained supply or a lack of commercial viability, pharmaceutical companies may choose not to bring these medications to Australia, because our prices are lower than international markets. The PBS may put barriers to save costs and prevent the best combinations and use of new medication in Australia and that would be a shame and would not be well accepted by our patients that represent over 10% of the adult population.

This presents a complex challenge for the government, but it is vital that our patients do not miss out on these potential breakthroughs. Early detection, treatment, and effective lifestyle interventions must be emphasized if we are to prevent healthcare costs from spiraling upward and avoid various difficulties for everyone

[17] Elliott et al. The impact of flash glucose monitoring on glycated hemoglobin in type 2 diabetes managed with basal insulin in Canada: A retrospective real-world chart review study. Diab Vasc Dis Res. 2021 Jul-Aug;18(4):14791641211021374.

involved. By prioritising these aspects, we can work towards improving patient outcomes, reducing the burden of comorbidities, and ensuring a sustainable healthcare system for all Australians.

Enablers

Enablers play a crucial role in enhancing the effectiveness of WSD's diabetes initiatives. To gain a comprehensive understanding of these enablers, I would recommend referring to WSD's *2022 Year in Review* document.

Priority and Place-Based Populations: Recognising the influence of social determinants on diabetes, WSD adopted a place-based approach in 2019. Toongabbie, Mt Druitt, and Blacktown were selected as focal areas to demonstrate the power of local community engagement in combating diabetes one geographical area at a time. In 2021, specific at-risk populations such as Indian and Filipino communities were targeted through community-led initiatives led by advocates from the health and community sectors. Efforts to improve the health of the Aboriginal and Torres Strait Islander population were also strengthened through enhanced coordination among multiple health agencies.

Community and Provider Engagement: The community has limited awareness and health literacy regarding the consequences of diabetes, prevention strategies, and disease management. In 2022, a community awareness campaign was launched to inform and engage the community, raising awareness about the risks of diabetes and encouraging positive steps towards better health. With the lifting of restrictions after the COVID-19 pandemic, WSD adopted a hybrid approach to communication, utilising both virtual and in-person methods. The *Western Sydney Changing Diabetes* partnership has significantly contributed to raising public awareness about diabetes.

Data for Decision Making: WSD aims to establish a population health surveillance and monitoring system to leverage data and intelligence in continuously monitoring and evaluating the burden of diabetes and the impact of interventions. The digital transformation prompted by the COVID-19 pandemic has facilitated the use of data in innovative ways, revolutionising diabetes management and providing valuable insights for program guidance.

Research: WSD actively promotes the adoption of interventions that have been evaluated and proven effective in other regions or locally. By bringing these interventions to a larger scale in the district, WSD strives to ensure evidence-based practices are implemented to address the challenges posed by diabetes.

These enablers collectively contribute to the effectiveness of WSD's diabetes initiatives, allowing for targeted interventions, community engagement, informed decision-making, and the expansion of evidence-based practices.

Conclusion

The escalating issue of diabetes in Western Sydney is a matter of grave concern, as it continues to grow at an alarming rate, making it an urgent health and societal challenge. Despite being confronted with limited resources and significant constraints, Western Sydney Diabetes (WSD) has been diligently identifying and trialing potential solutions that can make a tangible impact.

We are now shifting our focus towards the amplification of these solutions. To this end, I propose the following recommendations:

1) **Emphasis on Local Collaborations**: We should support local and regional initiatives that foster collaboration between all levels of government, community leaders, the private sector, and cultural/community leaders, with the common goal of understanding and addressing the diabetes issue. Through collaborative efforts, we can improve both the prevention and management of the disease. It's essential that these initiatives are led by strong, effective leaders. The "Lose 2 kg and Beat Diabetes Together" campaign stands as an exemplary initiative in this context.

   Additionally, we propose an annual investment in each innovating location, specifically targeting areas that have demonstrated a need and are providing real solutions. This strategy not only promotes positive deviancy towards better health outcomes but also enables the scaling-up of these solutions in several exemplary locations across Australia. It's an effective way to showcase what can be achieved through robust local multi-sector leadership and innovation.

2) **Champion Early Detection**: Support early detection through the use of HbA1C tests in hospital emergency departments, GP practices, and community settings. This enables individuals to learn about their risk of developing diabetes and facilitates effective communication plans, linking them to their GPs and providing local healthy living options. Our detection program embodies these features.

3) **Revamp Care Models**: Support new models of care that foster connections and integration between hospital specialty teams, GPs, and community providers. These models should incentivise collaboration to support patients in achieving desired outcomes. The DCC model is an example that requires better support through Medicare Benefits Schedule (MBS) and other direct health investments to incorporate incentives for integrated care into the Medicare system.

4) **Digitization of Care**: Embrace new digital technologies to improve diabetes care and reach individuals in more efficient and effective ways. We urge the government to fund CGM for all patients with T2D, similar to countries such as France, Canada and the UK that already provide CGM funding for patients with T2D. We recommend considering this approach nationwide. In particular, FreeStyle Libre CGMs could be considered as a low-cost option compared with more expensive and complex T2 medicine regimens. This would benefit all patients, including those with pre-diabetes.

5) **Holistic Investment Evaluations** Consideration of indirect costs into investment decisions. At the minimum, including quality of life and productivity benefits from current and upcoming interventions will enable better understanding of savings to the health system and the magnitude of benefits from the investment.

We would greatly appreciate the opportunity to meet with the committee to address any questions and provide further explanations about our prevention plans and models of care.

Taking these recommendations into account will contribute to bending the cost curve associated with diabetes and lead to improved health outcomes. By supporting local initiatives, promoting early detection, facilitating integrated care models, embracing digital technologies, and engaging in further discussion, we hope we can make meaningful progress in preventing and managing diabetes in Western Sydney and beyond.