



RACGP

RACGP submission to the
Inquiry into Diabetes in
Australia

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1. About the RACGP

The Royal Australian College of General Practitioners (RACGP) is the voice of general practitioners (GPs) throughout Australia. For more than 60 years, we have supported the backbone of Australia's health system by setting the standards for education and practice in primary healthcare and advocating for better health and wellbeing for all Australians.

As a national peak body representing over 46,000 members working in or towards a career in general practice, our core commitment is to support GPs from across general practice address the primary healthcare needs of the Australian population. More than 3500 RACGP members with specific interest in diabetes are also members of the RACGP Diabetes Specific Interest Group.

We cultivate a stronger profession by helping the GPs of today and tomorrow continue their professional development throughout their careers, from medical students and GPs in training to experienced GPs. We develop resources and guidelines to support GPs in providing their patients with world-class healthcare and help with the unique issues that affect their practices. We are a point of connection for GPs serving communities in every corner of the country.

Patient-centred care is at the heart of every Australian general practice, and at the heart of everything we do.

2. Introduction

Diabetes is the fastest growing chronic disease in Australia and affects approximately 5% of the population.¹ The prevalence of diabetes in Australia has been steadily increasing over the years, reflecting a global trend.² According to the 2019–20 Medicine Insight General Practice Insights report, patients recorded with type 2 diabetes (alone) accounted for 11.8% of encounters of the 13.3 million clinical encounters with general practitioners (GPs). Patients with type 1 diabetes represented 0.9% of clinical encounters, and patients with gestational diabetes represented 0.8% of encounters.³ It is believed that around 30% of Australians with diabetes are undiagnosed.⁴ Metabolic syndrome (a cluster of risk factors - high blood pressure, excess abdominal weight, low levels of HDL cholesterol and insulin resistance) which confers a three- to five-fold risk of type 2 diabetes is also a significant problem, affecting 20–30% of Australian adults.⁵

Rising rates of diabetes and other chronic disease, as well as the ageing population, means more patients are presenting to general practice with increasingly complex needs.⁶ These conditions are long term and require early identification and care that can be provided in the community by GPs and their multidisciplinary teams.

As highly trained specialist generalists, GPs play a fundamental role in the prevention, diagnosis, and management of diabetes across the life spectrum of this disease, working with patients at every stage of their healthcare. The holistic, patient-centred, and relationship-based approach of general practice ensures the effective delivery of care and treatment.

GPs are the anchor within a multi-disciplinary team of health professionals delivering high-quality healthcare for diabetes patients. GPs and their teams play a key role in coordinating health care for patients across sectors.

General practice is, therefore, central to a health system supporting people with diabetes. As GPs see approximately 85% of the Australian population in a year and the prevalence of diabetes is expected to increase over the next decade, it is important that there is investment to sustain a robust specialist general practice and primary care system.

By responding to the Inquiry Terms of Reference this submission highlights the role of general practice in diabetes care and makes 17 recommendations that the RACGP argues would greatly contribute to improving the care of people with diabetes.

3. Summary of RACGP recommendations

Recommendation 1 - Criteria of GDM testing and screening should be based on updated evidence and terminology for different risk groups.

Recommendation 2 - A national nutrition policy to support the current diabetes and obesity strategies that includes improving access to quality foods and dietary interventions for rural and remote communities with particular emphasis on First Nations nutritional needs.

Recommendation 3 - Incentivise and support screening for prevention-focused general practice through MBS rebates to support patients to regularly attend for prevention-focused general practice consultations.

Recommendation 4 - Invest in shared care models to optimise management of co-morbidities alongside and integrated with diabetes.

Recommendation 5 - Social prescribing be nationally supported and integrated with general practice.

Recommendation 6 - Incentivise point-of-care testing in general practice.

Recommendation 7 - Include GPs in the authorised group for certifying continuous and flash glucose monitoring access forms.

Recommendation 8 - Invest in research and innovative new approaches to understand the role of digital technologies in diabetes prevention and management.

Recommendation 9 - Increase funding for allied health supportive programs.

Recommendation 10 - Support intense lifestyle interventions that have been demonstrated to aid in diabetes remission.

Recommendation 11 - Invest in QUM programs.

Recommendation 12 - Support culturally appropriate strategies for the management of diabetes including [Birthing on Country](#) models that include wrap around support services that address issues such as gestational diabetes for First Nations communities.

Recommendation 13 - A nationally coordinated primary care plan is developed to address overweight and obesity, and diabetes remission, that includes clear referral pathways from GPs to programs promoting behavioural changes, specifically addressing needs of people with obesity and providing equitable support and access to evidence-based management to prevent an obese person from developing type 2 diabetes.

Recommendation 14 - Implement policies that place general practice at the centre of the health system supporting people with diabetes.

Recommendation 15 - Increase funding for standard general practice consultations. A 20% increase to Medicare patient rebates for Level C (20–40 minutes) and Level D (40-minute plus) GP consultations

Recommendation 16 - Provide funding for regular updates or living guideline approaches for these key RACGP resources that provide evidence-based support for GPs and health professionals managing type 2 diabetes in Australia

Recommendation 17 - Support is provided for dissemination and translation of these resources into practical treatment protocols across health services.

4. Terms of reference 1: The causes of diabetes (type 1, type 2 and gestational) in Australia, including risk factors such as genetics, family history, age, physical inactivity, other medical conditions and medications used

Diabetes is a chronic metabolic disorder that affects how the body processes blood glucose, the most common types encountered being type 1, type 2 and gestational diabetes, each with different etiology. There are also particular environmental risk factors that need to be addressed in diabetes prevention.

4.1 Type 1 Diabetes

Type 1 diabetes is an autoimmune condition, usually diagnosed in children and young adults, but can develop at any age. There are lesser-known sub-types of diabetes such as latent autoimmune diabetes in adults (LADA). LADA is similar to type 1 diabetes which is diagnosed in adulthood. Since Type 1 diabetes often develops rapidly, with resultant diabetic ketoacidosis and possible fatality, early detection is vital.

4.2 Type 2 Diabetes

Type 2 diabetes is a chronic and progressive medical condition which occurs due to modifiable lifestyle-related risk factors interacting with family related non-modifiable and genetic risk factors.⁷ The early identification and optimal management of people with type 2 diabetes can significantly reduce the risk of other conditions associated with type 2 diabetes. Type 2 diabetes progression can be slowed through the management of modifiable lifestyle-related risk factors including changes to diet and increasing the amount of physical activity.

4.3 Gestational Diabetes Mellitus (GDM)

GDM affects approximately 8–10% of pregnancies in Australia.⁸ GPs are often the main providers of ongoing prenatal, antenatal, and post-natal care and manage pregnant people with pre-existing diabetes.

The diagnosis of GDM has been a controversial area for decades, with guidelines based largely on consensus agreement. Health professionals currently approach the diagnosis of GDM utilising different screening criteria in early pregnancy (there are currently two sets of criteria that are utilised).⁹ The RACGP has [highlighted some concerns](#) about the Australasian Diabetes in Pregnancy Society guidelines. The current consensus based diagnostic testing for GDM in the ADIPS guidelines has resulted in escalating numbers of patients being diagnosed with GDM and fears about overdiagnosis. Overdiagnosis means pregnant women are being unnecessarily labelled with GDM and undergoing unnecessary interventions, which can lead to harm. It is also a waste of finite health resources.

A balance between the benefits and harms associated with increased GDM diagnosis needs to be carefully considered. Recent evidence questions the current consensus¹⁰ and criteria of GDM testing and screening needs to be reviewed.

Recommendation 1 - Criteria of GDM testing and screening should be based on updated evidence and terminology for different risk groups.

4.4 CALD populations

Certain culturally and linguistically diverse groups in Australia have a high prevalence of diabetes compared with the Australian-born population. These include people from subcontinent (South Asian origin, which includes individuals from countries such as India, Pakistan, Sri Lanka, Bangladesh, and Nepal,) and Pacific Islander (including people from countries like Samoa, Tonga, Fiji, and the Cook Islands) background. These high-risk groups need to be appropriately identified and managed in general practice.

4.5 Aboriginal and Torres Strait Islander people

Aboriginal and Torres Strait Islander people are almost four times more likely than non-Indigenous Australians to have type 2 diabetes.¹¹ Diabetes prevalence in remote populations (21%) is more than double that of non-remote populations (9%)¹¹ and is higher among Torres Strait Islander peoples than Aboriginal peoples.¹² Appropriate management of

diabetes can prevent the development or delay the progression of complications such as myocardial infarction, eye disease and renal failure in Aboriginal and Torres Strait Islander people.¹³

4.6 Food environment

The availability and accessibility of healthy food options, such as fresh fruits and vegetables, can vary between rural and remote areas and influence the prevalence and incidence of diabetes.¹⁴ The cost of fresh fruit and vegetables is often much higher compared to cities, leading to a reliance on processed and unhealthy food options.¹⁵ Utilising snap frozen fruit and vegetables is also limited due to some rural/remote Australian communities having no access to freezers for storage. In remote and rural areas, poor food supply undermines efforts to address the poor nutritional status of Aboriginal and Torres Strait Islander peoples.

Recommendation 2 - A national nutrition policy to support the current diabetes and obesity strategies that includes improving access to quality foods and dietary interventions for rural and remote communities with particular emphasis on First Nations nutritional needs.

5. Terms of reference 2: New evidence-based advances in the prevention, diagnosis and management of diabetes, in Australia and internationally

5.1 Prevention

Screening aims to detect diabetes early, even before noticeable symptoms appear, so that appropriate interventions can be initiated to manage the condition and prevent complications. The RACGP [guideline for preventive activities in general practice](#) recommends the following groups be screened as they may be at increased risk for diabetes at an earlier age or lower body mass index:

- first degree relative with diabetes
- high-risk race/ethnicity (Indian subcontinent of Pacific islanders)
- all people with a history of previous cardiovascular event (eg acute myocardial infarction or stroke)
- women with a history of gestational diabetes mellitus
- women with polycystic ovary syndrome
- patients on antipsychotic drugs.

To support screening, MBS rebates should be available to support patients to regularly attend for prevention-focused general practice consultation, similar to the one-off health assessment in middle age and annual over 75 health assessment. Access to similar item numbers would facilitate comprehensive screening, targeted disease detection and prevention in line with recommendations in the RACGP guideline for preventive activities in general practice.

Recommendation 3 - Incentivise and support screening for prevention-focused general practice through MBS rebates to support patients to regularly attend for prevention-focused general practice consultations.

5.2 Multidisciplinary care and management of co-morbidities

Benefits of shared multidisciplinary care include improved quality and continuity between services, reductions in hospital admissions, cost savings to the health system, improved patient health outcomes, higher levels of follow-up care and patient adherence to treatment.¹⁶ Investment in shared care models enable GPs and other health professionals in the team to work collaboratively and effectively at the top of their existing scopes of practice. For example, comorbid mental illness is particularly impactful in diabetes. Australian evidence demonstrates the effectiveness of these models for comorbid depression and diabetes.¹⁷

For some people with diabetes with other co-morbidities that impact the management of diabetes, successful coordination of care is supported by a trusted case manager such as a nurse coordinator which is embedded within general practice.^{18,19,20,21}

In all cases there is a need to support the work of primary care coordination through a combination of:

- Reviewing funding models to allow optimal use of care coordination
- Optimising use of shared clinical records
- Optimising IT infrastructure to identify presence of risk factors for, and existence of co-morbidities and
- The use of recalls and reminders to address modifiable risks and evidence-based interventions.

Recommendation 4 - Invest in shared care models to optimise management of co-morbidities alongside and integrated with diabetes.

5.3 Social prescribing

Social prescribing can provide a valuable addition to the existing range of healthcare options in Australia and should be nationally supported and integrated with general practice. This is a patient centred approach to care that can address key risk factors for poor health, including social isolation, loneliness, unstable housing, multi-morbidity, and mental health problems.

The GP's role as a trusted healthcare provider makes them ideally placed to offer individually tailored social prescriptions. Internationally, social prescribing is well established with formalised referral pathways, technologically integrated with GP software and has link worker workforces collaborating with GPs.²²

The RACGP has recommended social prescribing be embedded within the upcoming National Preventive Health Strategy. The joint RACGP and Consumer Health Forum [Social prescribing report](#) outlines how social prescribing can be incorporated into the Australian healthcare system.

Recommendation 5 - Social prescribing be nationally supported and integrated with general practice.

5.4 Point-of-care testing

Point-of-care testing (POCT) aims to provide immediate results at the time of patient consultation. Point-of-care testing is an important tool in management of diabetes with great potential to improve health outcomes, and should be available and affordable across the spectrum of general practice to improve patient monitoring and allow more timely clinical management and appropriate treatment. Funded point of care testing will be convenient for both the general practice and the patient, enabling good patient-centred care which will avoid further visits, and be economically effective for the health system.

Recommendation 6 - Incentivise point-of-care testing in general practice.

5.5 Continuous glucose monitoring (CGM) systems and flash glucose monitoring

Technological innovations for monitoring of glycaemia – such as continuous glucose monitoring (CGM) and flash glucose monitoring, provide greater insights into glycaemic patterns for patients.^{23,24} Presently, these services are restricted to patients with type 1 diabetes. Access is restricted to these monitoring systems via specialised diabetes services that are not available to all patients.

Specialisation of health services limits the support pathways that patients can access to support their clinical care, especially in regional/rural and remote communities. People from low socioeconomic status backgrounds also encounter cost barriers in accessing these types of services thus increasing inequalities of access to health services necessary to

reducing the burden of disease in Australia. GPs are usually the most accessible health service, but barriers have been unnecessarily created to inhibit GPs from supporting their patients access and use CGM systems. For example, currently, other members of the healthcare team are able to certify continuous and flash glucose monitoring access forms for people with Type 1 diabetes while GPs are not. Excluding the coordinating GP will disadvantage patients, particularly in rural and regional patients who may rely completely on their GP for their care.

It is important that GP education and resources are available to enable more GPs to support their patients in CGM. However, the RACGP does not support any mandate for GPs to complete additional educational requirements as this will only increase barriers to patients accessing appropriate diabetes services.

Recommendation 7 - Included in the authorised group for certifying continuous and flash glucose monitoring access forms.

5.6 Digital tools

Emerging consumer digital tools show some promise. Tools that track and monitor targets or prompt behavioural changes are likely to play an increasing role in healthcare. The RACGP [Healthy Habits](#) initiative is an example of an innovative digital tool working to connect patients with GPs and their teams. The program aims to support GPs and their practice teams to encourage patients to achieve healthier lifestyles, through increased physical activity and improved nutrition. The Healthy Habits app makes it easy to set simple, personalised goals to move more or eat better, and share and celebrate progress with the GP and Primary Care Nurse.

Recommendation 8 - Invest in research and innovative new approaches to understand the role of digital technologies in diabetes prevention and management.

5.7 MBS Chronic Disease planning

Chronic Disease Management Plans facilitate access to allied health clinicians, such as podiatrists, diabetes educators and dietitians. However, there are cost barriers to people from lower socioeconomic backgrounds as the MBS rebate does not cover the full cost of care and these services.

Furthermore, people most at risk of developing diabetes currently cannot access MBS funded Chronic Disease Management planning in the absence of a diagnosable co-morbidity. There is evidence that allied health supportive programs^{25, 26} can prevent development of diabetes by 58% with persistence of effect to 15 years after intervention and these programmes may be cost-effective.^{27, 28}

Recommendation 9 - Increasing funding for allied health supportive programs.

5.8 Diabetes-related retinopathy

Diabetes-related retinopathy occurs as a result of microvascular disease of the retina. It affects up to one in three people with diabetes, and can cause visual impairment and blindness.⁹ Optometric services and point of care retinopathy screening tools in general practice are effective and efficient and these should continue to be supported through Medicare.

5.9 Type 2 Diabetes remission

General practice-based remission programs should be supported. Some people with type 2 diabetes can reduce their average glucose level and sustain it at the level required for a prolonged period of time without the need for glucose lowering medication. This is known as 'remission'. Intensive lifestyle remission programs should be supported and funded in general practice.

Recommendation 10 - Support intense lifestyle interventions that have been demonstrated to aid in diabetes remission.

5.10 Quality use of medications (QUM)

Use of medications for diabetes often fail to reach evidence-based measures and patient goals. This fact coupled with the increasing number and cost of medications suggest there is value in investing in QUM programs aimed at adherence and deprescribing.

Electronic clinical decision support, that integrates with GP desktop systems and into clinical workflows offer promise in this area. Focus should be on high-risk patient groups, including Residential Aged Care residents and people with multimorbidities and polypharmacy.²⁹ Expansion of the [60 day dispensing rules](#) will also support people with diabetes with high burdens of medication use.

Recommendation 11 - Invest in QUM programs

5.11 GDM management in rural/remote general practice

Improving diabetes in pregnancy outcomes is vital for maternal and child health, particularly for Aboriginal and Torres Strait Islander people, those in remote and lower socioeconomic areas. In 2020–21, the incidence of gestational diabetes was 1.2 times higher in Aboriginal and Torres Strait Islander women compared to other women, between 1.1-1.2 times higher among those living in remote and very remote areas compared to major cities and inner regional areas and 1.6 times higher for women living in the lowest socioeconomic areas compared to those living in the highest socioeconomic areas.³⁰ Good quality data and a collaborative multidisciplinary approach is essential to identifying areas for improvement within services and systems, and mobilise action.

The [Diabetes across the Lifecourse – Northern Australia Partnership](#) is an existing project that aims to improve systems of care and services for women with diabetes in particular improving health outcomes by reducing risk associated with diabetes in pregnancy as early as possible in the life course.

Research focused on GP care of pregnant women in low socioeconomic areas to improve pregnancy and child outcomes is limited. More funding for research required in this area.

Recommendation 12 - Support culturally appropriate strategies for the management of diabetes including [Birthing on Country](#) models that include wrap around support services that address issues such as gestational diabetes for First Nations communities.

6. Terms of reference 3: The broader impacts of diabetes on Australia's health system and economy

In 2019-20, diabetes expenditure reached A\$3.1 billion and almost 1.3 million hospitalisations were associated with diabetes in 2020–21.³⁰

Governments pay more for a single patient hospital admission (\$5020) than they would the cost of that same patient visiting their GP twice a week for an entire year (\$3973).³¹ There is opportunity for patients to be further supported to access care routinely through their general practice.

Evidence-based preventive care and high-quality acute and chronic disease management provided through general practice:

- reduces disease complications and prevalence of preventable hospital presentations and admissions
- reduces healthcare expenditure for government

- reduces future out-of-pocket costs for patients
- addresses health disparities and inequities experienced by some population groups
- increases the overall economic productivity of society.

7. Terms of reference 4: Any interrelated health issues between diabetes and obesity in Australia, including the relationship between type 2 and gestational diabetes and obesity, the causes of obesity and the evidence-base in the prevention, diagnosis and management of obesity

Whole of government approach

Diabetes and obesity are global epidemics that contribute to cardiovascular mortality.^{32, 33} Sixty-seven per cent of Australians are overweight or obese³⁴ and obesity plays a major role in diabetes onset, complications and also other chronic diseases.

It is clear that obesity and diabetes prevention and management require whole of government investment in addressing social determinants of health, public health models of care, legislative changes as well as supporting general practice.

Approaches should include consideration of the built environment and city design (eg space that encourages and supports people to exercise and increase physical activity), transport infrastructure (eg using public transport, walking, cycling), food policies and regulation (eg restricting advertising of processed and nutrient poor foods to children and adolescents, food security, taxing sugar-sweetened beverages etc.), social security and equity policies

Increased health literacy about the importance of healthy eating and exercise can influence healthy lifestyle factors to improve health outcomes and potentially reduce risk of diabetes in Australia. However, vulnerable communities often cannot afford healthy foods, turning to more processed foods to meet their needs.

Children are especially vulnerable to socially determined disadvantage and suffer the absence of acquiring healthy lifestyles that transmit to adulthood and development of preventable disease.³⁵

Role of GP

GPs are at the forefront of managing and addressing obesity. Their role encompasses prevention, diagnosis, treatment, education, and ongoing support to ensure patients lead healthier lives and manage these chronic conditions effectively. However, the ongoing management of obesity is difficult because of a lack of treatment pathways. As an example, access to bariatric surgery outside of high-cost self-funded processes remains limiting.

Research shows that general practice approaches to addressing weight loss in early diabetes can result in remission of diabetes.³⁶

Recommendation 13 - A nationally coordinated primary care plan is developed to address overweight and obesity, and diabetes remission, that includes clear referral pathways from GPs to programs promoting behavioural changes, specifically addressing needs of people with obesity and providing equitable support and access to evidence-based management to prevent an obese person from developing type 2 diabetes.

8. Terms of reference 5: The effectiveness of current Australian Government policies and programs to prevent, diagnose and manage diabetes.

Optimising care for people with type 2 diabetes requires health system changes to place primary care at the centre of diabetes care. Funding for complex care is needed in general practice.

In the long-term, the [RACGP Vision for general practice and a sustainable healthcare system](#)³¹ sets out a roadmap for sustainable and high-quality healthcare created through a strong primary care system. General practice is the most efficient part of the healthcare system. The Vision places the patient at the centre of care, supported in the first instance by their regular GP and broader general practice team. GPs and their teams then connect their patients to, and guide them through, the often complex wider healthcare system. The Vision calls for reforms to support building multidisciplinary teams within general practice, to ensure continuity of high-quality care for all patients. This evidence-based approach is particularly important for the growing number of people with chronic and complex conditions, such as diabetes.

Increasing funding for standard general practice consultations longer than 20 minutes is a simple and effective way to build additional support for people with complex health need. It supports patients who need to spend longer consultation times with their GP.

Recommendation 14 - Implement policies that place general practice at the centre of the health system supporting people with diabetes.

Recommendation 15 - Increase funding for standard general practice consultations. A 20% increase to Medicare patient rebates for Level C (20–40 minutes) and Level D (40-minute plus) GP consultations

Clinical guidelines

Clinical guidelines are key to supporting the delivery of evidence-based care. The RACGP independently funds and develops several key resources that provide evidence-based information on diabetes and preventive health interventions. These are used by other specialised diabetes health professionals to guide clinical care including Nurse Practitioners, General practice nurses, Credentialed diabetes educators. These resources include:

- The RACGP [Management of type 2 diabetes: A handbook of general practice](#) (Diabetes Handbook) which provides up-to-date, evidence-based information tailored for general practice to support GPs and their teams. The Diabetes Handbook has been developed in partnership with Diabetes Australia. An update of this guideline is currently in progress.
- The RACGP [Guidelines for preventive health activities in general practice \(9th edition\)](#) provides guidance to general practice teams on screening and opportunistic and proactive preventive care.
- The RACGP [Handbook of Non-Drug interventions](#) (HANDI) includes interventions for people with diabetes.

The [National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people \(3rd edition\)](#) is a joint initiative of the National Aboriginal Community Controlled Health Organisation (NACCHO) and RACGP, and is funded by the Australian Government Department of Health. It provides health professionals with an accessible, user friendly guide to best practice in preventive healthcare for Aboriginal and Torres Strait Islander patients.

Recommendation 16 - Provide funding for regular updates or living guideline approaches for these key RACGP resources that provide evidence-based support for GPs and health professionals managing type 2 diabetes in Australia

Recommendation 17 - Support is provided for dissemination and translation of these resources into practical treatment protocols across health services.

9. Conclusion

There is no single curative intervention that will 'fix' diabetes. Addressing the broader impacts of diabetes requires a multifaceted approach, including public health interventions, policy changes, education, and support for individuals and families affected by the disease. Reducing the burden and impact of diabetes will be strongly influenced by the routine systems in place to provide chronic disease care, which must have a focus on investment to develop and sustain a robust specialist GP and primary care system.

Individual focussed preventive health, screening, diagnosis, and management of diabetes (like all other high prevalence conditions) are predominantly undertaken in general practice. Policy and funding that supports these activities in general practice will improve the prevention, diagnosis and management of diabetes by GPs in Australia.

An ageing GP workforce, years of chronic underfunding for general practice and a decrease in the numbers of medical students choosing general practice as a career³⁷ are producing significant consequences for our community, health system and economy. Ensuring long term sustainability of general practice will require significant policy intervention and further government investment.

The RACGP again thanks the House of Representatives standing committee on health, aged care and sport for the opportunity to provide this submission. For any enquiries regarding this letter, please contact Stephan Groombridge, National Manager, Practice Management, Standards & Quality Care on 03 8699 0544 or stephan.groombridge@racgp.org.au.

10. References

1. Australia. D. Diabetes in Australia. Diabetes Australia; 2023 [cited 2023 20 June 2023]. Available at: <https://www.diabetesaustralia.com.au/about-diabetes/diabetes-in-australia/>.
2. Ong KL, Stafford LK, McLaughlin SA, Boyko EJ, Vollset SE, Smith AE, et al. Global, regional, and national burden of diabetes from 1990 to 2021, with projections of prevalence to 2050: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet*. 2023;402(10397):203-34.
3. NPS MedicineWise. General Practice Insights Report July 2019–June 2020 including analyses related to the impact of COVID-19. Sydney: NPS MedicineWise2021. <https://www.nps.org.au/assets/NPS/pdf/GPIR-Report-2019-20.pdf>
4. Sainsbury E, Shi Y, Flack J, Colagiuri S. The diagnosis and management of diabetes in Australia: Does the “Rule of Halves” apply? *Diabetes Research and Clinical Practice*. 2020;170:108524.
5. healthdirect. Metabolic syndrome. 2021. Available at: <https://www.healthdirect.gov.au/metabolic-syndrome>.
6. Australian Institute of Health and Welfare. Chronic conditions and multimorbidity. AIHW; 2023 [updated 30 June 2023]. Available at: <https://www.aihw.gov.au/reports/australias-health/chronic-conditions-and-multimorbidity>.
7. Nolan CJ, Damm P, Prentki M. Type 2 diabetes across generations: from pathophysiology to prevention and management. *Lancet (London, England)*. 2011;378(9786):169-81.
8. Moses RG, Morris GJ, Petocz P, San Gil F, Garg D. The impact of potential new diagnostic criteria on the prevalence of gestational diabetes mellitus in Australia. *The Medical journal of Australia*. 2011;194(7):338-40.
9. The Royal Australian College of General Practitioners. Management of type 2 diabetes: A handbook for general practice. East Melbourne VIC: RACGP; 2020 [cited 2023 20 June 2023]. Available at: <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/diabetes/introduction>.
10. Simmons D, Immanuel J, Hague WM, Teede H, Nolan CJ, Peek MJ, et al. Treatment of Gestational Diabetes Mellitus Diagnosed Early in Pregnancy. *New England Journal of Medicine*. 2023;388(23):2132-44.
11. Australian Institute of Health and Welfare. The health and welfare of Australia’s Aboriginal and Torres Strait Islander peoples. Canberra: AIHW2015
12. Minges KE, Zimmet P, Magliano DJ, Dunstan DW, Brown A, Shaw JE. Diabetes prevalence and determinants in Indigenous Australian populations: A systematic review. *Diabetes Res Clin Pract*. 2011;93(2):139-49.
13. Couzos S, Murray R. Aboriginal primary health care: An evidence-based approach. 3rd ed. Melbourne: Oxford University Press; 2008.
14. Alston L, Partridge SR. Limited dietary interventions in rural Australian communities: A systematic review. *Nutrition & Dietetics*. 2021;78(1):57-68.
15. Whelan J, Brown AD, Collier L, Strugnell C, Allender S, Alston L, et al. The Impact of COVID-19 on Rural Food Supply and Demand in Australia: Utilising Group Model Building to Identify Retailer and Customer Perspectives. *Nutrients*. 2021;13(2):417.
16. The Royal Australian College of General Practitioners. Shared Care Model between GP and non-GP specialists for complex chronic conditions position statement. East Melbourne, VIC: RACGP; 2023 [cited 2023 15 September].
17. Morgan MAJ, Coates MJ, Dunbar JA, Reddy P, Schlicht K, Fuller J. The TrueBlue model of collaborative care using practice nurses as case managers for depression alongside diabetes or heart disease: a randomised trial. *BMJ open*. 2013;3(1):e002171.
18. Nieuwboer MS, Perry M, van der Sande R, Maassen I, Olde Rikkert MGM, van der Marck MA. Identification of influencing factors and strategies to improve communication between general practitioners and community nurses: a qualitative focus group study. *Family practice*. 2018;35(5):619-25.
19. AIHW. Diabetes. Canberra: AIHW; 2023 [cited 2023 20 June 2023]. Available at: <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/diabetes/overview>.
20. AIHW., Thow A, Waters A-M. Diabetes in culturally and linguistically diverse Australians: identification of communities at high risk. Canberra: Australian Institute of Health and Welfare; 2005.
21. Young-Hyman D, de Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial Care for People With Diabetes: A Position Statement of the American Diabetes Association. *Diabetes care*. 2016;39(12):2126-40.
22. Frostick C, Bertotti M. Social prescribing in general practice. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2019;69(688):538-9.

23. Macdonald EM, Perrin BM, Kingsley MI. Enablers and barriers to using two-way information technology in the management of adults with diabetes: A descriptive systematic review. *Journal of telemedicine and telecare*. 2018;24(5):319-40.
24. Xu S, Alexander K, Bryant W, Cohen N, Craig ME, Forbes M, et al. Healthcare professional requirements for the care of adult diabetes patients managed with insulin pumps in Australia. *Internal medicine journal*. 2015;45(1):86-93.
25. Nathan D, Barrett-Connor E, Crandall J, Edelstein S, Goldberg R, Horton E, et al. Long-term effects of lifestyle intervention or metformin on diabetes development and microvascular complications over 15-year follow-up: the Diabetes Prevention Program Outcomes Study. *The lancet Diabetes & endocrinology*. 2015;3(11):866-75.
26. Knowler WC, Fowler SE, Hamman RF, Christophi CA, Hoffman HJ, Brenneman AT, et al. 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. *Lancet (London, England)*. 2009;374(9702):1677-86.
27. Roberts S, Barry E, Craig D, Airoidi M, Bevan G, Greenhalgh T. Preventing type 2 diabetes: systematic review of studies of cost-effectiveness of lifestyle programmes and metformin, with and without screening, for pre-diabetes. *BMJ open*. 2017;7(11):e017184.
28. Stokes J, Gellatly J, Bower P, Meacock R, Cotterill S, Sutton M, et al. Implementing a national diabetes prevention programme in England: lessons learned. *BMC Health Services Research*. 2019;19(1):991.
29. Stasinopoulos J, Bell JS, Manski-Nankervis JA, Hogan M, Jenkin P, Sluggett JK. Medication management of type 2 diabetes in residential aged care. *Australian journal of general practice*. 2018;47(10):675-81.
30. AIHW. Diabetes: Australian facts. Canberra: AIHW; 2023 [cited 2023 7 August 2023]. Available at: <https://www.aihw.gov.au/reports/diabetes/diabetes-australian-facts/contents/impact-of-diabetes/health-system-expenditure>.
31. The Royal Australian College of General Practitioners. Vision for general practice and a sustainable healthcare system. East Melbourne, VIC: RACGP2019. <https://www.racgp.org.au/advocacy/advocacy-resources/the-vision-for-general-practice/the-vision>
32. Chobot A, Górowska-Kowolik K, Sokółowska M, Jarosz-Chobot P. Obesity and diabetes-Not only a simple link between two epidemics. *Diabetes/metabolism research and reviews*. 2018;34(7):e3042.
33. Brown OI, Drozd M, McGowan H, Giannoudi M, Conning-Rowland M, Gierula J, et al. Relationship Among Diabetes, Obesity, and Cardiovascular Disease Phenotypes: A UK Biobank Cohort Study. *Diabetes care*. 2023;46(8):1531-40.
34. AIHW. Overweight and obesity. AIHW; 2023 [cited 2023 20 June 2023]. Available at: <https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity/contents/summary>.
35. Mollborn S, Lawrence E. Family, Peer, and School Influences on Children's Developing Health Lifestyles. *Journal of health and social behavior*. 2018;59(1):133-50.
36. Unwin D, Delon C, Unwin J, Tobin S, Taylor R. What predicts drug-free type 2 diabetes remission? Insights from an 8-year general practice service evaluation of a lower carbohydrate diet with weight loss. *BMJ Nutrition, Prevention & Health*. 2023;6(1):46-55.
37. The Royal Australian College of General Practitioners. General Practice Health of the Nation. East Melbourne, VIC: RACGP 2022