Further investigation

Greater levels of targeted general practice research can help GPs better manage and treat diabetes.

It would come as no surprise to healthcare professionals that diabetes has become something of a national epidemic, with as many as 1.7 million Australians living with the chronic condition.\(^1\)

While close to one million of these people have type 2 diabetes, type 1 and gestational diabetes are also very prevalent. In addition, it is estimated 500,000 Australians currently have undiagnosed type 2 diabetes.\(^2\)

As the incidence of diabetes continues to rise, so too does the burden of care faced by GPs and others in general practice, who are a fundamental part of the frontline healthcare group for Australians with this chronic condition.

‘For a person to live a healthy life with diabetes, they need a close relationship with their GP and with other health professionals,’ Greg Johnson, Chief Executive Officer of Diabetes Australia, told *Good Practice.*

‘Primary care research is critically important because that’s where the epidemic of type 2 diabetes is diagnosed and primarily managed.’

Despite the crucial role GPs play in its management, however, general practice-specific research into diabetes, including how to optimise treatment and implement prevention strategies, has been somewhat lacking.

Assoc Prof John Furler, GP and research fellow in the Department of General Practice at the University of Melbourne, whose work focuses on diabetes, believes the general practice profession needs to be better represented in research for such a widespread illness.

‘It is important to build evidence that is relevant to the realities of actual practice, so it is conceived in and of an Australian general practice setting by GPs and other health professionals, and even patient groups as well,’ he told *Good Practice.*

‘Our research studies are about trying to reduce the burden of care and treatment in a very complex condition, like diabetes in primary care, to make the work of patients and practitioners easier in order to reduce that burden and improve outcomes.

‘You need to make work in general practice easier and more strongly evidence-based.’

Dr Jo-Anne Manski-Nankervis is a GP and was the 2014 recipient of the RACGP/Diabetes Australia research grant. This annual grant awards $60,000 to fund research into diabetes management, prevention, and/or clinical care in general practice (refer to breakout on page 11 for more information).

Manski-Nankervis agrees that the pervasiveness of diabetes in Australia, as well as GPs’ role in its treatment and management, demands general practice be a higher research priority in this area.

‘We have over a million people in Australia with type 2 diabetes. The majority of these people receive their care in general practice, yet a lot of research is not done within the general practice setting,’ she told *Good Practice.*

‘That can create questions such as, “Is the research relevant to the type of people who receive treatment in general practice?” “Can we do the kind of interventions that are being researched and studied in a different setting?”

‘We have to have research happening in general practice that can inform our care.’

Dr Manski-Nankervis, a research fellow at the University of Melbourne, studies the use of general practice data to assess diabetes management, evaluate models of care and develop systems to provide decision support to help GPs in their practices, among other areas.

Her ‘Stepping up’ trial, which involved Assoc Prof Furler and for which some funding came from the RACGP/Diabetes Australia research grant, examined timely initiation of insulin for people with type 2 diabetes.

‘The “Stepping up” trial showed a clinically and statistically significant improvement in glycaemic control among the patients in general practice who were part of that trial.’
intervention group,’ Dr Manski-Nankervis explained. ‘So GPs and practice nurses were upskilled in insulin initiation and intensification, and they were provided with a lot of mentoring by a credentialled diabetes educator.’

Preventive care

According to Assoc Prof Peter Schattner, GP and 2015 recipient of the RACGP/Diabetes Australia research grant, work to help educate GPs in the management of diabetes is key in helping to improve its treatment in general practice.

‘I think there certainly are some very important [diabetes] research questions for general practice. But, in a sense, they are not necessarily the basic science ones,’ he told Good Practice.

‘I think what is important in general practice has to do with the management [of diabetes], and that has to do with the refinement of care planning and multidisciplinary care, and perhaps the medical home concept.

‘These are areas that need to be evaluated and researched in general practice to see how we can fine tune the way we do things to get better outcomes for patients.’

With an estimated two million Australians currently at risk of developing diabetes, prevention is one of the most important areas for primary care.

‘Prevention really has come to the fore in the last 10 years or so,’ Johnson said. ‘A big part of the Diabetes Australia remit is now to try and stop people from getting diabetes, so prevention of development of type 2 diabetes with public policy and prevention programs.’

Assoc Prof Schattner also feels general practice research should reflect the importance of preventive activities.

‘The kind of research that is required in general practice is prevention that is perhaps not drug-based, but is based on the ability of GPs to intervene in some way that alters lifestyle and risk factors for these patients,’ he said.

While acknowledging the inherent difficulties associated with people making lifestyle changes, Assoc Prof Schattner has found a proactive and structured approach to be more beneficial to patients than an ‘ad-hoc, reactive’ one.

Assoc Prof Furler agrees and believes GPs’ ability to more easily direct at-risk patients to strategic preventive settings is an area ripe for increased levels of quality data.

‘The evidence is there that the structured programs are effective, [yet] very few people will actually get access to them,’ he said.

‘There is definitely … an opportunity there to study how to more widely implement those sorts of evidence-based, structured lifestyle programs. >>

Foundation grant

The annual RACGP/Diabetes Australia research grant was established in 1984 and is designed to support research into diabetes in general practice. A grant of up to $60,000 is available for a period of one year to fund research into diabetes management, prevention, and/or clinical care in general practice.

Visit http://foundation.racgp.org.au/information/diabetes for more information, including eligibility details and selection criteria.

The RACGP Foundation has up to 20 grants available to GPs and general practice registrars.

Online applications for 2017 research grants and awards open on 7 March and will close on 8 May. Visit www.racgp.org.au/foundation for more information and to apply.
'I am sure GPs are generally aware of the effectiveness of lifestyle change, but they may not be quite so aware of the effectiveness of structured programs in bringing about those changes for patients.

'My feeling is that GPs are very busy and what they probably need is ways of linking people into such programs in very accessible, seamless sorts of ways.

'There is a lot of research that can be done there about how to implement these types of programs.'

Future challenges

Given its ubiquity, the future of diabetes treatment and management presents a number of challenges.

'The big emerging trends that we think are really serious are, firstly, younger people getting type 2 diabetes, and that's been a trend now for over a decade,' Johnson said. 'It used to be uncommon to see someone under 40 or 50 with type 2 diabetes, but now we have thousands of people in their 20s, and even children and adolescents, with type 2 diabetes.

'Secondly, gestational diabetes. The numbers there, again, are growing at alarming rates. That's a huge issue because the new science is suggesting that both the mum and the baby have an increased risk of getting type 2 diabetes and other chronic conditions.'

Johnson also points to Australia’s ageing population as a growing issue.

'If you look at the numbers, there's very large numbers of people who are older now with diabetes, whether it's type 1 or type 2. They have lived with it for a long time and are now in their 70s,' he said.

'There's a huge challenge in how they're going to self-manage as they get older.

'They might lose a family member or carer – that carer who is so critical might pass away or have their own healthcare problems – or they might move out of their stable environment to an aged care facility where their diabetes management gets out of control.

'And instead of then living a relatively healthy last part of their life for the final 10, 15 or 20 years, it becomes a burden where you get serious problems.'

The burdens of diabetes are not limited to the physical, however, with significant unseen issues associated with the disease.

'The mental health burden of diabetes is huge,' Johnson said. 'About one-third of all people with diabetes, whether it's type 1 or type 2, have moderate to severe anxiety or depression. About 10% will have clinical depression, but one-third will have moderate to severe anxiety and a lot of that can be related to the challenge of living with diabetes.

'That gets in the way of management and treatment, but it also gets in the way of living a productive life. It's a vicious cycle.'

With such a broad range of challenges, research in general practice, where so many of these issues can be tackled in a structured and systematic way, is more important than ever.

'Primary care research is really critical for how things can be done better,' Johnson said.

'The research into looking at systems, making sure we are using registries, understanding where these people with diabetes are, understanding what age they are, their stage of diabetes, is vital.

'The starting point in primary care is to find these patients and conduct a risk assessment.

'If a GP says to a person, “You are at high risk of developing type 2 diabetes but you can prevent that, and here’s what you can do and some places you can go”, that is incredibly powerful.

‘Diabetes Australia has been dedicated to research because we know research is fundamentally critical if you want to prevent things, if you want to find cures, if you want to find treatments. And that’s where our relationship with the RACGP comes in.

‘We want to change the world for the better for people with diabetes and to do that we need to work with the RACGP and similar organisations.

‘We want research to change the world.'

References


Diabetes Australia

Diabetes Australia is the national body for people affected by diabetes that aims to provide a single, powerful, collective voice for people living with diabetes, their families and carers.

The organisation works in partnership with many organisations, including the RACGP, as well as healthcare professionals, educators and researchers to minimise the impact of diabetes in the Australian community.

In addition to the RACGP/Diabetes Australia research grant, the two organisations collaborated to develop the recently updated General practice management of type 2 diabetes, which is designed to provide up-to-date, evidence-based information tailored to the management of diabetes in Australian general practice.