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Unveiling the Value of KeepSight: Enhancing Diabetes-Related Vision Care and Preventing Vision Loss

Diabetes Australia
Final Report – 2025

Deloitte
Access Economics

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Glossary

Acronym	Full name
ACT	Australian Capital Territory
AIHW	Australia Institute of Health and Welfare
FY	Financial year
GP	General practitioner
NDSS	National Diabetes Services Scheme
NHS	National Health Service
RANZCO	Royal Australian and New Zealand College of Ophthalmologists
SMS	Short message service
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

Foreword

At the heart of our work at Diabetes Australia is a deep commitment to creating a meaningful impact in the lives of people with diabetes and those at risk.

Of all the serious complications that can be caused by diabetes, blindness is one of the most life changing. It's also preventable in 90% of cases.

So, in 2019, Diabetes Australia introduced a once-in-a-generation initiative to end avoidable vision loss and blindness for Australians with diabetes, by reminding people living with diabetes to get their eyes checked.

We did so in a unique public/private partnership with matched funding from the Australian Government and our founding partner, Specsavers, as well as support from Oculo, Vision 2020 Australia, the Centre for Eye Research Australia (CERA) and the wider eye-sector.

We call it KeepSight – and it's changing lives.

I would like to take this opportunity to thank the many Diabetes Australia employees, and our partners, who have worked tirelessly to develop, launch, refine and build this incredibly important initiative. Their dedication and commitment have been instrumental in making KeepSight a success and ensuring it continues to improve the lives of Australians living with diabetes.

This report provides evidence of the impact that is being made by simply reminding people to keep an eye on their sight.

The report shows that people who receive KeepSight reminders are 20% more likely to return for a follow up appointment, and they're more likely to do that within recommended timeframes. That means more people are having their sight monitored regularly, which ensures eye complications can be identified and treated sooner.

With diabetes and its complications, as with so many things, prevention is better than cure. As well as the enormous impact on a person's life, the economic cost of preventable diabetes-related vision loss is up to $5.3 billion each year. By practically supporting people to have regular eye checks, we are helping prevent diabetes-related blindness.

Diabetes Australia is proud of the KeepSight program and we're excited to see how much more can be achieved in the years ahead.

Justine Cain,
Group CEO, Diabetes Australia

Executive summary.

The impact of KeepSight

Over the last five years, KeepSight has been instrumental in promoting regular eye checks among people living with diabetes, facilitating early detection and timely treatment of diabetes-related eye conditions. The analysis of KeepSight data revealed the following four key insights:

Insight 1. KeepSight has achieved high coverage across the Australian population living with diabetes – Approximately one third of people with diabetes (32%) are registered with KeepSight, which has grown from 4% in 2020.

Insight 1.1. Facilitating behaviour change among people with low engagement with health services – KeepSight has reached, recalled and educated people with a history of low engagement with optometry health services. Approximately 29% of program participants who had registered with KeepSight through non-optometry clinic pathways had not seen an optometrist in the last two years. Without KeepSight resources and recalls, it is unlikely that these people would be regularly visiting an optometry clinic.

Insight 2. Evidence suggests that the KeepSight program has contributed to more regular and timely optometry visits among people with diabetes.

Insight 2.1. KeepSight reminders work. One in five people who received a 'KeepSight safety net reminder' returned for assessment within the recommended period. These people did not respond to optometry reminders and are unlikely to have returned to an optometry clinic without a health behaviour change intervention such as KeepSight.

Insight 2.2. KeepSight improves rates of return appointments. Data shows that KeepSight program participants are 20% more likely to return for assessment relative to people with diabetes who are not on KeepSight. This analysis underscores the effectiveness of the program on patient recall rates and timeliness, encouraging regular optometric check-ups among people living with diabetes.

Insight 2.3. KeepSight helps people return on time. For those who do reattend for assessment, KeepSight increases the timeliness of return appointments. Most recently, program participants from 2022 returned on average 123 days earlier between their 1st return visit and most recent return visit, which may reflect a greater awareness of the importance of visiting an optometrist.

Insight 3. KeepSight participants are more likely to return within RANZCO recommended timeframes. Trends over time show growth in the proportion of KeepSight program participants returning within the recommended timeframes, increasing from 49% in 2019 to 63% in 2022. It is reasonable to infer that the program played an important role in driving this 14% increase.

Insight 4. KeepSight can reduce the cost of eye complications. The economic cost of avoidable diabetes vision loss is up to $5.3 billion per annum. By promoting regular eye checks and timely intervention, KeepSight is contributing to a reduction in these costs in Australia. As 90% of vision loss is preventable, increasing the coverage of behaviour change programs, like KeepSight, is key to result in significant gains in quality of life for people living with diabetes and savings in healthcare expenses.

The impact of KeepSight extends beyond the direct impacts on program participants. The establishment of KeepSight introduced a new clinical pathway in optometry care – one in which diabetes status is systematically documented and monitored consistently throughout the eye care journey. This has enabled a nationally consistent and comprehensive approach to managing the eye health of Australians with diabetes.

Conclusion and future considerations

KeepSight has achieved considerable success in coordinating multiple sectors within a commercial environment, mobilising key players across government, optometry, ophthalmology and peak bodies to collaborate towards a common goal. This collaborative approach has been instrumental in aligning efforts, resources and expertise to enhance diabetes-related eye care and improve outcomes for people living with diabetes.

The program has set new benchmarks in diabetes care by establishing a nationally consistent approach that can be replicated across optometry clinics, setting the gold standard for diabetes-related eye care practices. Additionally, it has introduced a new clinical pathway that ensures diabetes status is consistently documented and monitored. This innovative pathway not only improves the management of diabetes but also enhances the management of eye health, providing a comprehensive framework for better patient outcomes and setting a model for future initiatives.

The continued support and expansion of KeepSight is crucial in achieving its objectives to ensure that all Australians living with diabetes have access to the necessary resources to protect their vision and overall health. A number of opportunities exist for the expansion of the reach and impact of KeepSight:

- **Opportunity 1: Increase overall registration rates amongst the population living with diabetes.** The rising prevalence of diabetes in Australia means we must prioritise eye health due to the risk of diabetes-related retinopathy. KeepSight has been well received by people living with diabetes. There is an opportunity to engage with people who are newly diagnosed with diabetes to ensure they receive support and resources to manage their eye care.
- **Opportunity 2: Invest in understanding the registration rates across demographic cohorts.** Participation rates in KeepSight vary by geography, age and priority populations. Analysis of program data to understand the drivers influencing program participation can facilitate the development of targeted strategies to improve engagement and participation across different groups.
- **Opportunity 3: Increase program recall rates.** KeepSight has increased optometry recall rates for people living with diabetes however there is a subset of participants who do not engage with KeepSight following registration. There is potential to enhance recall further by understanding and addressing barriers to engagement.
- **Opportunity 4: Leverage data collection capability to support better policy decisions.** The richness and comprehensiveness of KeepSight program data, as well as the framework to collect clinical data can be used to guide policy decisions, improve funding allocation and advocate for eye care advances in areas of need.
- **Opportunity 5: Enhance engagement with service providers and introduce new referral channels.** KeepSight has strong optometry coverage overall, with the opportunity to increase its reach into more independent providers. Increasing coverage, including through primary care channels such as general practitioners (GPs) and pharmacies, can be achieved through targeted outreach, integration into practice management systemsand improving the visibility of clinic participation data.

KeepSight is improving the eye health of Australians living with diabetes. Increased impact can be achieved by increasing registration rates among newly diagnosed individuals, understanding demographic participation patterns, enhancing recall rates, leveraging data for policy development and expanding engagement with service providers.

Diabetes Australia can drive substantial improvements in diabetes-related eye care. These strategies not only aim to prevent complications but also promote long-term eye health, ensuring that all Australians living with diabetes have access to necessary eye care services. The insights gained from KeepSight will not only benefit local initiatives but also contribute valuable knowledge to global health efforts.

Deloitte Access Economics

1. Background

1.1 Context

Diabetes mellitus, or diabetes, poses one of the greatest challenges to Australia's healthcare system. Data from the National Diabetes Services Scheme (NDSS) shows that the number of people with diagnosed diabetes in Australia has risen by 32%, from 1.1 million in 2013 to 1.5 million in 2023.[1]

The KeepSight Program

In recognition of the need to enhance the management of eye health, and promote eye assessments for people living with diabetes, Diabetes Australia launched KeepSight in 2019. Funded by the Australian Government and public/private partnerships including founders Specsavers and Vision2020 Australia, KeepSight serves as a key step towards a systematised national digital diabetes eye check reminder program to prevent diabetes-related vision loss and blindness.

KeepSight aims to increase the frequency of eye assessment to detect early signs of diabetes-related retinopathy and other vision-related complications. Program participants receive regular reminders for eye check-ups (via email, Short Message Service (SMS) or post depending on the program participant's preference), ensuring they stay proactive in managing their eye health. There are three main ways that people living with diabetes can opt into KeepSight:

- **Activation through optometry clinics,** where optometrists check a person with diabetes' eyes, introduce the program, and ask if they would like to join the program
- **Activation through alternative pathways,** including NDSS communication, health practitioners (e.g., general practitioners, credentialled diabetes educators)
- **Self-registration** on the KeepSight website.

Participants opt in to receive 'KeepSight safety net reminders', which are sent 6 weeks and 10 weeks after they receive optometry clinic-specific reminders to get their eyes checked, ensuring continuous follow-up and encouraging adherence to regular eye examinations. Reminders are only sent in the event of non-response to the clinic-reminder.

Objective and methodology of the project

This study uses a mixed-method approach, including a desktop review of publicly available sources, analysis of KeepSight Dashboard data and Specsavers data (through data request). In addition, a costing exercise was conducted to demonstrate the program's efforts to encourage people living with diabetes to attend regular eye examinations, to enhance not only their eye health but overall health outcomes.

Diabetes mellitus

Diabetes mellitus, or diabetes, is a condition characterised by high levels of glucose in the blood. It occurs when the body cannot make enough insulin, a hormone that regulates blood glucose, or cannot effectively use the insulin it produces. The main types of diabetes include:

01. **Type 1 diabetes.** An autoimmune condition where the body's immune system attacks insulin-producing cells in the pancreas. The cause of type 1 diabetes is unknown however it is hypothesised that environmental factors may set off the autoimmune reaction. Type 1 diabetes is not linked to modifiable lifestyle factors and currently there is no cure for the condition.[2]

02. **Type 2 diabetes.** A metabolic condition in which the body's cells become resistant to the normal effects of insulin, and the pancreas cannot produce enough insulin to overcome this resistance. Type 2 diabetes is strongly linked to genetic and non-modifiable risk factors and is also often associated with modifiable risk factors such as diet and physical activity.

03. **Gestational diabetes.** A condition that develops during pregnancy. The cause of gestational diabetes is not fully known, however known risk factors include (but are not limited to) older age, family history, cultural background, being overweight or obese, prior diagnosis of gestational diabetes and gaining excessive weight during pregnancy.[3]

04. **Other types of diabetes.** Rarer or less common types of diabetes can be caused by genetic variations, other medical conditions (also known as secondary diabetes) or by certain medications (such as corticosteroids, antipsychotics and beta-blockers).[4]

Australia is in the midst of a diabetes epidemic which poses a significant challenge for the country's healthcare system. Based on data from the National Diabetes Services Scheme (NDSS), the total number of people known to be living with all types of diabetes in Australia has increased from approximately 1.1 million to 1.5 million people from 2013 to 2023 – representing a 32% increase over this period. [5] The total number of people living with diabetes in Australia is likely to be much higher, as NDSS data only represents people who have been diagnosed with diabetes and registered with the Scheme.

Diabetes affects all bodily systems and when blood glucose is not managed for sustained periods of time the risk of complications increases. This includes diabetes-related retinopathy, an eye condition caused by damage to the retinal blood vessels that can cause vision impairment and blindness. Nearly all individuals with type 1 diabetes and over 60% of those with type 2 diabetes will develop some form of retinopathy within 20 years of diagnosis. However, early detection through regular eye assessment, coupled with timely intervention, can prevent or delay these complications.[6]

The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) recommends eye examinations at diagnosis for people living with diabetes and every one to two years thereafter (annual visits are recommended for Aboriginal or Torres Strait Islander people). Despite these guidelines, adherence is low in Australia, with only approximately 50% of people with diabetes having eye examinations within the recommended timeframe and just 21% of those with diabetes for over 10 years adhering to annual examinations.[7] People living with type 1 diabetes should commence assessments at puberty, and people living with diabetes with known risk factors (such as high blood pressure, poor diabetes management, high-risk cohorts such as Indigenous people) and those with existing eye disease should have an annual eye check or more frequent checks as recommended by their healthcare provider.[8]

The impact of diabetes on vision loss and blindness

Living with diabetes can significantly affect a person's physical, mental, social and financial wellbeing.[9] Effective diabetes management is crucial to reducing these impacts and the risk of complications.
As diabetes is a condition that affects all systems in the body[10], diabetes that is not appropriately managed results in an increased risk of eye problems related to high blood glucose levels

In the short-term, eye problems can include blurred vision, infections, conjunctivitis (inflammation and redness of the lining of the whites of the eyes and the membranes surrounding the inner eyelids), uveitis (inflammation of the middle portion of the eye, the uvea) and stye (an eye infection along the lash line due to blocked oil glands on the eyelid).[11]

The risk of more serious and permanent eye problems increases with chronically elevated levels of blood glucose, high blood pressure or high cholesterol levels. Long-term eye problems include cataract, glaucoma, retinal detachment, diabetic macular oedema and diabetes-related retinopathy.[12]

Diabetes-related retinopathy occurs when high blood glucose levels damage the tiny blood vessels in the retina, the light-sensitive tissue at the back of the eye. This damage can cause the vessels to swell, leak or close off, leading to vision impairment.[13] In the early stages of diabetes-related retinopathy, there may be no symptoms or changes to a person's vision.

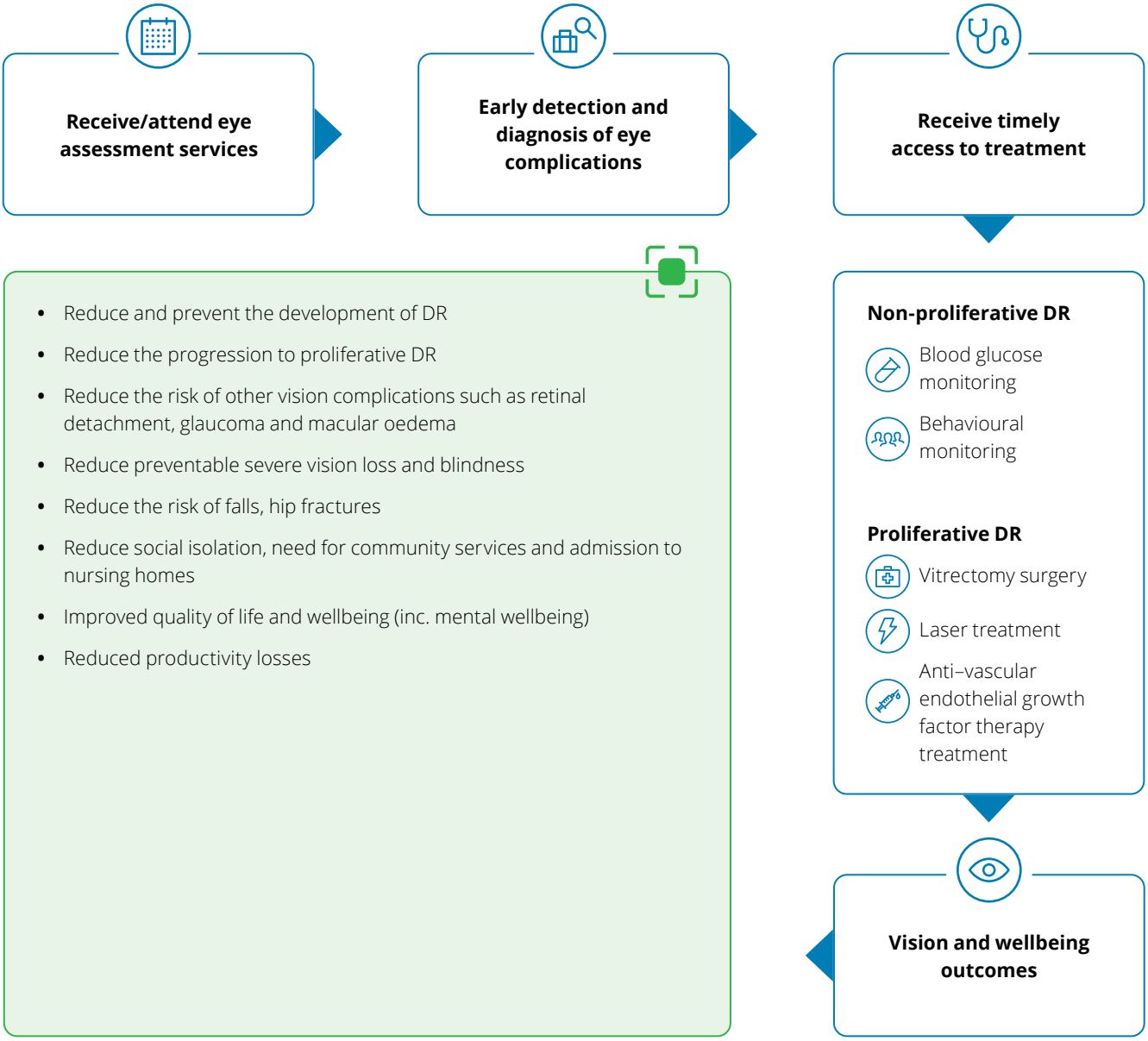
The impact of diabetes-related retinopathy does not only have a health impact but an economic impact, including direct medical costs and indirect costs resulting from lost productivity, disability and premature death. One economic burden study in 2015 estimated that the total indirect cost of vision loss associated with diabetic macular oedema is $2.07 billion. A substantial amount of this cost ($553.42 million) results from the loss of wellbeing including the impact on working-age individuals who are unable to work due to having diabetic macular oedema.[14] The data presents a clear economic case for ensuring that people living with diabetes continue to engage with the health system including early and timely access to eye health services.

The importance of eye examination programs for people living with diabetes

Many diabetes-related complications, such as diabetes-related retinopathy and diabetes-related vision loss, are preventable or can be substantially delayed if identified early, when medical treatment and interventions are most effective.[15] One of the most important preventative strategies involves assessments, as many types of diabetes-related retinopathy have no symptoms until their late stages.

Early eye examinations for people living with diabetes offers significant benefits, including the timely detection of diabetes-related retinopathy and other vision-related complications. By identifying these issues at an early stage, interventions can be implemented before severe damage occurs, greatly reducing the risk of vision loss. This proactive approach not only preserves vision and improves quality of life but also reduces healthcare costs associated with treating advanced eye conditions. An overview of the benefits of eye examinations services across the care pathway is shown in Figure 1.1.

Figure 1.1: Schematic of the benefits of eye examination services in people living with diabetes



Source: Deloitte Access Economics (2025) using Stefansson (2000) [16], Forster (2013)[17], Kozioł (2020)[18], Hristova (2021)[19], Early Treatment Diabetic Retinopathy Study Research Group (1985)[20], Diabetic Retinopathy Vitrectomy Study (1990)[21], Diabetic Retinopathy Vitrectomy Study (1978)[22] and Kitano (2019).[23]

Regular examinations can identify early signs of damage before symptoms appear, enabling timely treatment to preserve vision. In Iceland, the implementation of routine screening in 1980 found that after 10 years, no patient had progressed from no retinopathy to sight-threatening retinopathy in less than two years.[24] Similarly, in the United Kingdom (UK), comprehensive screening programs have successfully reduced diabetes-related retinopathy to no longer being the leading cause of blindness in England after more than 50 years. The National Health Service (NHS) reported a decrease in short-term diabetes-related retinopathy at second screening from 21.6% in 2008 to 8.4% in 2011.[25] Additionally, countries like Poland and Sweden have experienced notable reductions in diabetes-related blindness and vision impairment due to great emphasis on screening initiatives.[26,27]

Despite the proven benefits of regular eye examinations, adherence to recommended guidelines remains a challenge in Australia. Data from the 45 and Up Study revealed that in 2016 only 49% of people living with diabetes had an eye examination within the recommended timeframe, with adherence rates falling between 21% to 28% of people living with diabetes for 10 years or more.[28]

Low adherence to regular eye examinations among people living with diabetes may be due to a lack of awareness about their necessity (other behavioural barriers to routine eye examinations are discussed in more detail in Section 2.1 [noting that barriers to care extend beyond behavioural barriers]).[29] A study found that nearly three-quarters of non-adherent Australians living with diabetes were unaware of the need for regular eye examinations.[30] This was particularly the case for younger people living with diabetes, possibly because they do not perceive themselves at risk and consider vision loss associated with older age. Awareness campaigns have successfully increased knowledge and participation in screening programs for people living with diabetes-related retinopathy, underscoring the importance of communication, education, and awareness of these services.

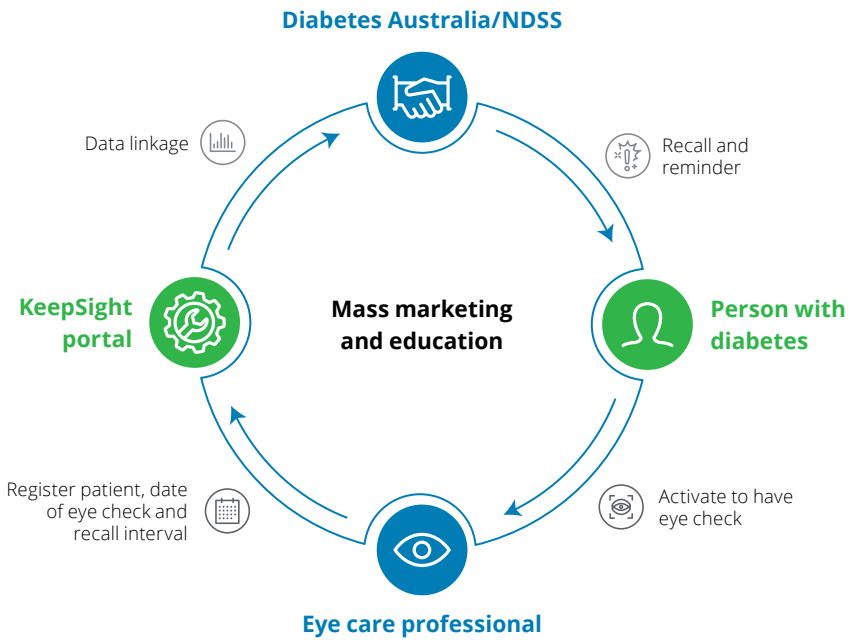
1.2 Addressing the gap through KeepSight

Diabetes Australia launched KeepSight in 2019, in recognition of the need to enhance the management of eye health and promote eye assessments for people living with diabetes. It did so in a unique public/private partnership with matched funding from the Australian Government and founding partner, Specsavers, as well as support from Oculo, Vision 2020 Australia, and the Centre for Eye Research Australia (CERA) and the wider eye-sector. KeepSight serves as a key step towards a systematised national digital diabetes eye check reminder program to prevent diabetes-related vision loss and blindness.

KeepSight directly supports global efforts such as the International Diabetes Federation and International Agency for Prevention of Blindness in respect to their "Call for Global Action" policy brief, with a focus for stakeholders to increase access to examinations, timely treatment and diabetes education, and reduce the risk of developing diabetes-related retinopathy and vision loss.[31]

KeepSight aims to increase the frequency of eye assessments to detect early signs of diabetes-related retinopathy and other vision-related complications. By onboarding with KeepSight, program participants receive regular reminders for eye check-ups (via email, SMS or post depending on the program participant's preference), ensuring they stay proactive in managing their eye health. KeepSight collaborates with healthcare professionals, optometrists, ophthalmologists and peak bodies to create a comprehensive network of support and eye care. Through these efforts, KeepSight aims to reduce the incidence of diabetes-related vision loss, improve patient outcomes and raise awareness about the importance of regular eye examinations in people living with diabetes. A high-level schematic of KeepSight is shown Figure 1.2.

Figure 1.2: Schematic of KeepSight



Source: Adapted from Diabetes Australia (2024).

1.3 Purpose of this report

Diabetes Australia commissioned Deloitte Access Economics to assess the evidence generated from KeepSight; articulate its impact since; and consider its future potential in preventing diabetes-related vision loss. This report demonstrates the program's efforts to encourage people living with diabetes to attend regular eye examinations, to enhance not only their eye health but overall health outcomes.

1.4 Methodology and report structure

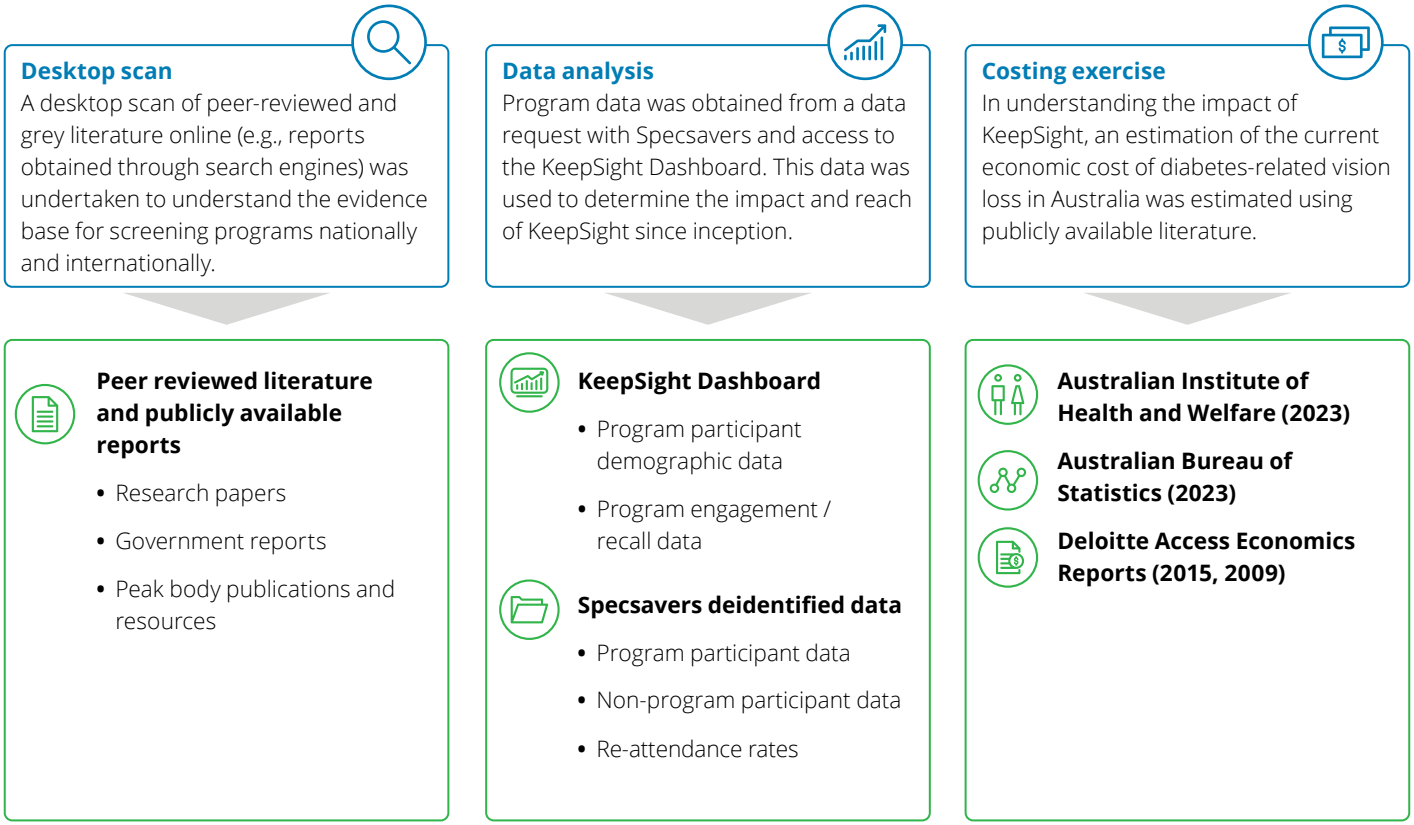
This report employs three different analysis techniques: a desktop review of the existing evidence landscape, analysis of program data, and a costing exercise. These approaches are detailed in Figure 1.3. The full methodology and sources used in the methodological approach are detailed in Appendix A.

The remainder of the report is structured as follows:

- Section 2 discusses the impact of KeepSight to date
- Section 3 summarises the key findings and outlines future opportunities for KeepSight.

An appendix is included to provide a detailed account of the evidence that supports the findings from this report.

Figure 1.3: Methodological overview



Source: Deloitte Access Economics (2025).

2. The impact of KeepSight

2.1 Driving behaviour change through KeepSight

At the outset of KeepSight a Theory of Change was developed to provide a clear and structured roadmap for achieving the intended outcomes. This outlines the necessary inputs, activities, and assumptions required to deliver on the desired change. This also included identifying the necessary short- and medium-term outcomes that need to be realised to achieve the long-term objectives of KeepSight.

The Theory of Change is shown in Figure 2.1 as a visual pathway of change with the objective of KeepSight at the top of the diagram. The diagram is read from left to right, where the short-term (pre-conditions) must be met before progressing to the next stage of the change process .

Figure 2.1: Theory of Change for KeepSight

Objectives: (i) To encourage people with diabetes to get their eyes checked and register with the KeepSight program (ii) To make people with diabetes aware of their risk of diabetes related eye damage and vision loss (iii) To encourage health care professionals to register their patients with the KeepSight program (iv) To raise awareness and support for the KeepSight program across health and community sectors.

Inputs	Activities	Outputs
NDSS database	Register people with diabetes with the NDSS	Number of health providers registered with KeepSight
KeepSight website and portal	Obtain consent from people registered on the NDSS to enrol in KeepSight	Number of eye appointments booked
Practice management system technology providers	Engage with the eye sector to increase awareness of KeepSight	Number of eye appointments conducted
Optometry workforce	Send out direct alert communication (via email, SMS or direct mail reminder)	Number and type of promotional information disseminated
Eye check awareness and alert/ reminder system	Develop promotional information	Number of meetings with partner stakeholders / organisations to develop wellbeing solutions
Funding	Undertake communication strategy	
Partner organisations	Liaison with partner stakeholders / organisations	
People with diabetes registered with the NDSS	Undertake advocacy activities	
KeepSight project staff	Identify ongoing opportunities to evaluate and improve the delivery of KeepSight	

Source: Diabetes Australia and Deloitte Access Economics (2025).

Outcomes

Short term (0-3 years)	Medium term (3-10 years)	Long term (10+ years)
Increase target population's understanding of the importance of regular eye checks	Enhanced target population's adherence to completing their regular eye checks	Improved early detection of vision loss
Increase target population's understanding of the importance of eye health	Patients are better able to self-manage their eye care	Reduced rate of preventable vision loss
Increase number of people registered with KeepSight	Earlier detection of eye issues/ complications	Reduced burden on the healthcare system from early intervention
Increase number of eye appointments booked	Earlier treatment of eye issues/ complications	
Enhance health professionals' awareness of KeepSight	Achieve 80%+ integration of KeepSight in mainstream optometry sector	
Enhance target population's awareness of KeepSight	Increase recall for eye checks within clinically required timeframes	
Improve stakeholders' coordination of encouraging proactive eye health management	Improve ability to record and monitor clinical outcomes	
	Improved engagement with the eye health sector	
	Improve understanding of, and implementation of successful strategies to target people not engaged in eye care	

Assumptions / External factors

- The compliance and willingness of partner organisations and services to engage collaboratively with the KeepSight program
- KeepSight has access to sufficient staffing and financial resources to meet the needs of participants
- KeepSight staff are able to access the NDSS database
- Clinical data is available to measure impact
- Participants respond and adhere to the reminders from KeepSight only
- Participants adhere to the care pathway including appointment, treatment and intervention

Through the articulation of the Theory of Change, KeepSight systematically addresses the multiple and complex barriers that contribute to low appointment attendance among people living with diabetes. A number of known barriers that contribute to low examination attendance of people living with diabetes are detailed in Table 2.1. The table also details how KeepSight addresses these barriers, through the program's design and implementation. The table is not intended to be an exhaustive list of barriers contributing to low examination attendance, but instead highlights the key barriers that KeepSight is intending to address.

Table 2.1: KeepSight's strategies for addressing behavioural barriers to eye check attendance through its design elements

Theme	Barrier	How KeepSight addresses this barrier
Decision making and attention	• **Confounding decision-making.** People living with diabetes make up to 180 decisions per day related to their health and are often juggling comorbidities.[32] • **Absence of symptoms.** The absence of symptoms for diabetes-related retinopathy often results in people living with diabetes deciding that an assessment is not necessary.	KeepSight reduces the confounding decisions that a patient needs to make in relation to their diabetes. The program makes it as simple as possible to schedule and attend an eye check, providing links and reminders to minimise decision burden.
Knowledge	• **(Lack of) awareness of diabetes-related retinopathy.** Lack of knowledge about diabetes, diabetes-related retinopathy and the link between the two was a barrier to attendance. • **(Lack of) awareness of need for assessment.** Lack of understanding of why a diabetes eye check is needed.	KeepSight provides educational material and information to promote awareness and knowledge of diabetes eye check process and importance of regular engagement with primary eye care for people with diabetes.
Accessibility to care	• **Scheduling appointment issues.** Problems with scheduling appointments include a long wait to receive an appointment and inability to get an appointment.	Pre-booked appointments and text-reminders from optometry clinics and 'KeepSight safety net reminders' support adherence and recall within the recommended period.
Social influences	• **Doctor-patient communication.** Recommendation by the healthcare provider / practitioner to attend examination was a barrier.	KeepSight provides an informed voice and trusted recommendation by key medical professionals to encourage optometry examination attendance. Communication from healthcare providers / institutions such as peak bodies play a crucial role in promoting adherence.
Emotional burden	• **Fear or anxiety.** Attending appointments can worsen negative emotions for some people with diabetes, such as feelings of failure, guilt and fear, due to the emotional burden of their condition.	KeepSight eases emotional burden and fears in patients by providing trusted supportive communication and information from key medical professionals to encourage patients to attend optometry examinations.
Financial barriers	• **Perceived cost.** Cost of the appointment or need for additional costs (such as referral).	KeepSight provides educational material to program participants, including highlighting that most optometry appointments are bulk billed, and that no referral is needed.

Source: Deloitte Access Economics (2025) using Prothero (2021).[33]

2.2 Changing the optometry landscape

The impact of KeepSight extends beyond the direct health effects on program participants. The establishment of KeepSight introduced a new clinical pathway in optometry care, in which diabetes status was systematically documented and monitored consistently throughout the eye care continuum. This enabled a nationally consistent approach to managing both diabetes and eye health, improving efficiency and enhancing the timely access to treatment by systematically addressing all necessary components of care. This nationally consistent approach not only optimises individual patient care but also supports data collection and analysis, leading to improved strategies for managing diabetes on a larger scale. A detailed discussion of how KeepSight has impacted the optometry landscape in Australia is detailed in Table 2.2.

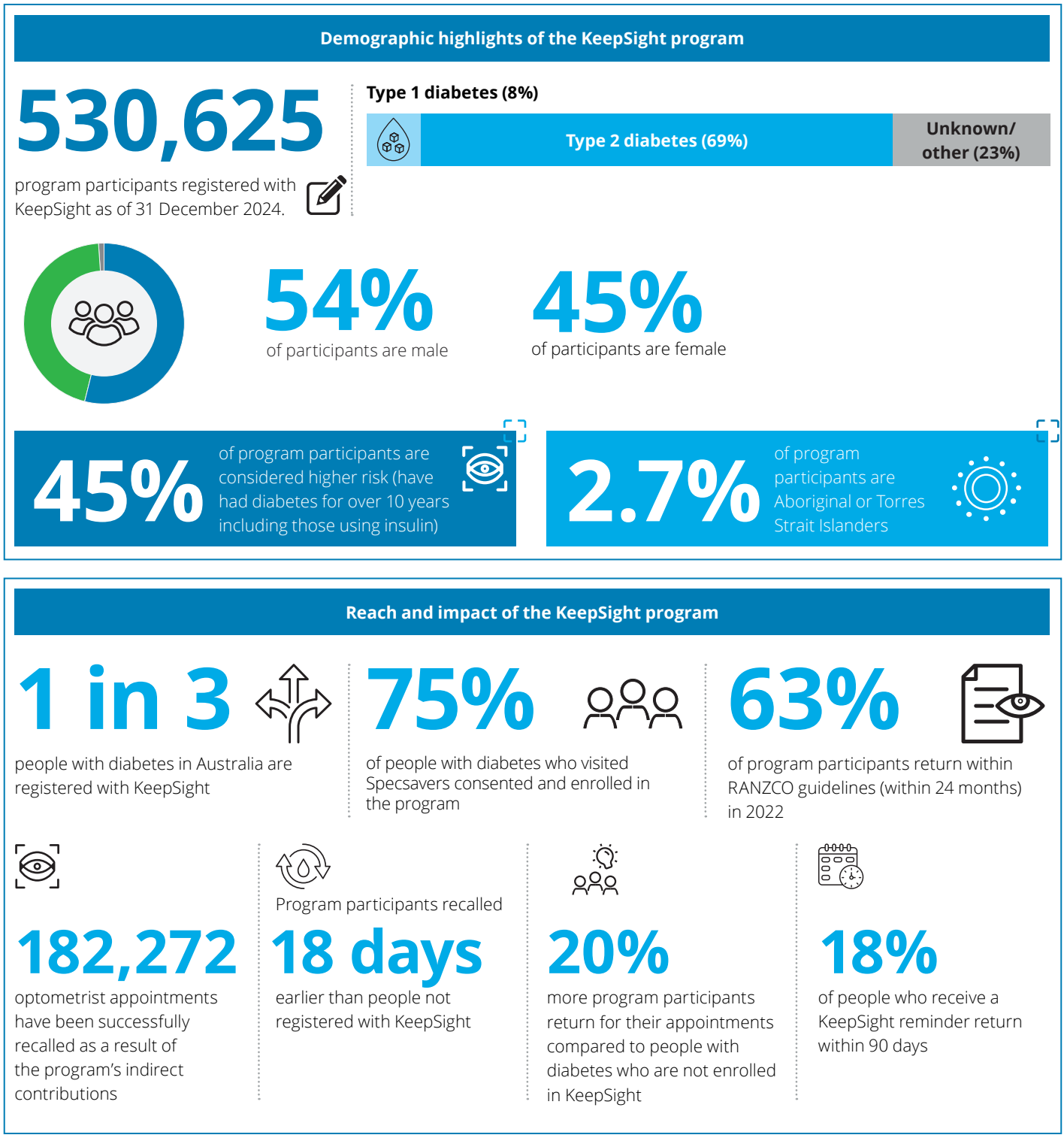
Table 2.2: Optometry landscape prior and since the introduction of KeepSight

	Prior to KeepSight	Since the introduction of KeepSight
Clinical pathway	There was a lack of a nationally consistent approach to clinically identify people with diabetes in eye care. There was no flag or question that was required by optometrists, orthoptists, ophthalmologists and Aboriginal Health professionals.	KeepSight has integrated questions about a patient's diabetes status into the clinical pathway. This has allowed primary eye care professionals to inquire about a patient's diabetes status, and recall program participants back into the optometry clinic for an eye check. Although good clinical practices, such as patient recall, were in place before KeepSight, they were not consistently tracked or monitored over time. In addition, diabetes status was not routinely tracked, which could result in people not having appropriate eye checks, or within recommended RANZCO guidelines. The program has set new benchmarks in diabetes care by establishing a nationally consistent approach that can be replicated across optometry clinics, setting the gold standard for diabetes-related eye care practices.
Data availability	The health system does not systematically track eye health outcomes among people with diabetes. There was limited oversight of how people with diabetes interact with optometry services.	The program has established a framework for diabetes monitoring in optometry and the capability for collection of baseline and clinical data. Once standardised data is available clinical data tracking can directly benefit broader health economic outcomes such as reducing healthcare costs, improving quality of life and informing public health strategies to prevent complications associated with diabetes.
Perceived importance of eye care	Need for sector alignment and further emphasis on diabetes-related retinopathy in primary eye care.	By participating in the program and instituting diabetes assessment prompts into clinical practice, health professionals are more informed and are engaged with patients with diabetes. On a program participant level, KeepSight can raise awareness of the importance of eye health and encourage them to be proactive in the management of their eye health.
Collaboration	A less formal framework to bring together key sector players to collectively address vision loss caused by diabetes.	The program has been able to mobilise key sector players across government, optometry, ophthalmology and peak bodies, to collaborate and work towards a common goal of improving eye health outcomes for people with diabetes. This collaborative approach has been instrumental in aligning efforts, resources and expertise to enhance diabetes-related eye care and improve outcomes for people living with diabetes.

2.3 Reach and impact of KeepSight

An overview of KeepSight's reach and impact to date are shown in Figure 2.2. A detailed discussion of KeepSight's key impacts subsequently follows.

Figure 2.2: Overview of KeepSight's reach and impact



Source: Deloitte Access Economics (2025) using Diabetes Australia (2024) and Specsavers (2023).

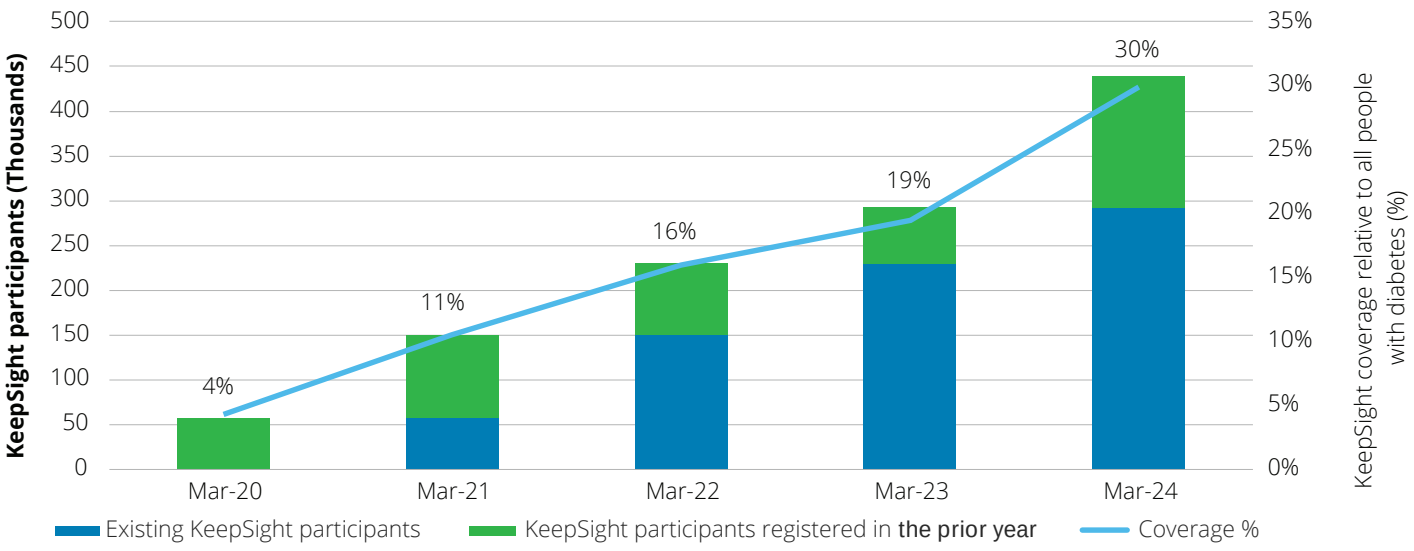
Insight 1: KeepSight has achieved high coverage across the Australian population living with diabetes – Approximately one third of people with diabetes (32%) are registered with KeepSight, which has grown from 4% in 2020.

Since January 2019, KeepSight has now reached **approximately one third of Australians living with diabetes (32%)** – with 530,625 active participants in the program as of December 2024.

KeepSight's growth has increased overtime, including experiencing a strong growth of 48% in the latest financial year (FY) of the program (July 2023 to June 2024; see Chart 2.1), demonstrating significant increase in program adoption and highlighting the program's expanding reach and potential impact on eye health management.

Chart 2.2 illustrates the coverage of KeepSight by age group and geography.

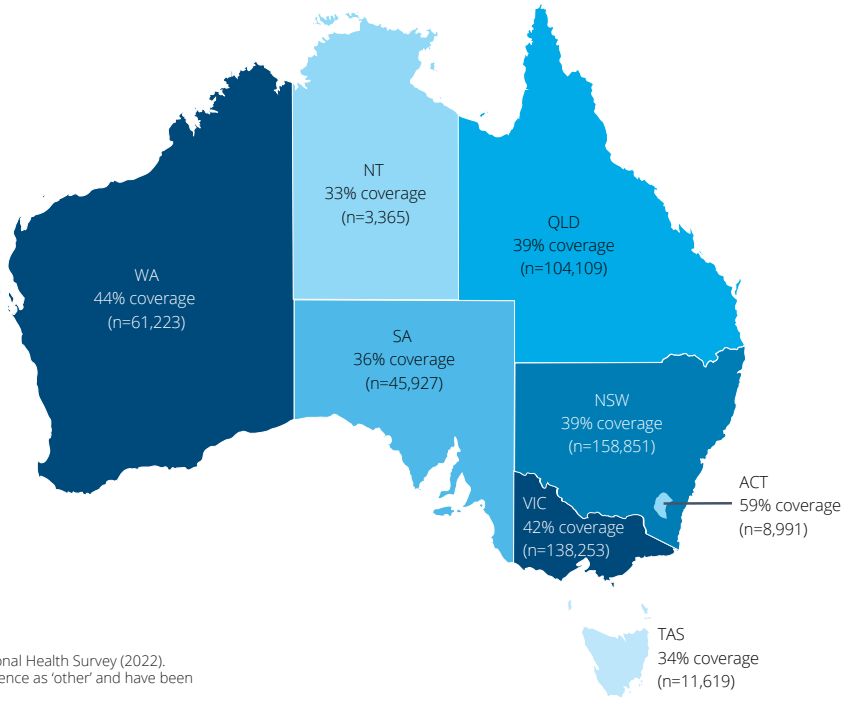
Chart 2.1: KeepSight participants over time (March 2020 – March 2024)



Source: Diabetes Australia (2024) and NDSS (2019-2024). Note: Data is presented until March of each year from 2020 to 2024 to align with the latest reporting from the NDSS. As KeepSight commenced in January 2019, the March 2019 timepoint has not been included in the chart as at March 2019 the program had only been running for three months.

Chart 2.2: KeepSight participants by age group (top) and geography (bottom; as of December 2024)

Source: Diabetes Australia (2024) and National Health Survey (2022).
Note: RANZCO guidelines recommend regular eye checks for individuals aged 12 and above. For this reason, the 0-14 age group is omitted from the chart.



Source: Diabetes Australia (2024) and National Health Survey (2022).
Note, 241 participants recorded their residence as 'other' and have been excluded from the analysis.

KeepSight has reached people living with diabetes across all age groups. The coverage rate is **highest among the population aged 75+ years** (44% of all people in this age group living with diabetes) whilst the lowest coverage rate is among the population aged 25-34 years (31% of all people in this age group living with diabetes).

While coverage for the 25-34 year age group is not substantially lower than other age groups, this may be an indication that this population is less likely to visit an optometrist. This is unsurprising given existing evidence has found that while many young people value vision, they do not have an eye examination as often as they should and that eye examinations were only perceived to be needed for younger people experiencing symptoms.[34]

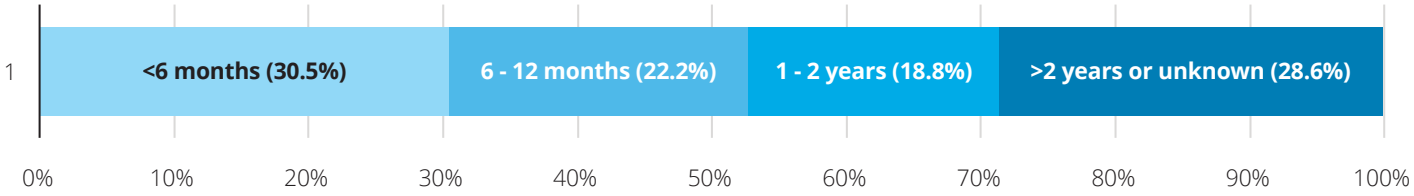
The program has a presence in all states and territories of Australia, reaching approximately **32% of the Australian population living with diabetes** (i.e., have received a KeepSight reminder through the program). A notable achievement of KeepSight has been its reach in the Australian Capital Territory (ACT), where **approximately 59% of the population with diabetes are registered with the program**. It is not clear what factors are driving this high participation rate in KeepSight, however, it is consistent with other health initiatives (such as the National Cervical Screening Program) where the ACT has the highest participation rates of all states and territories.[35] While the literature does not specifically mention the drivers influencing participation in the National Cervical Screening Program, it is likely that a combination of patient related barriers (e.g., barriers in knowledge, health literacy) and healthcare system barriers (e.g., accessibility of health service, availability of preferred healthcare providers) contributes to the lower participation rates in other states/territories in Australia.[36]

Exploring participation across different geographical areas and age groups can help to identify where resources are needed to improve equity, accessibility and participation in eye health programs and can inform strategies to improve assessment rates among defined target groups. For example, increasing eye health awareness among younger people through the program can inform them about available eye services, helping to prevent and manage potential eye conditions before they progress into more complicated and complex conditions.

Insight 1.1: Facilitating behaviour change among people with low engagement with health services – KeepSight has reached, recalled and educated people with a history of low engagement with optometry health services.

Analysis of KeepSight data found that approximately 29% of program participants who had registered with KeepSight through non-optometry clinic pathways had not seen an optometrist in the last two years (see Chart 2.3). It is reasonable to assume that these individuals have low engagement with health services, making their enrolment in KeepSight and receipt of reminders especially important for maintaining their eye health.

Chart 2.3: Time since last eye test among program participants registered with KeepSight



Source: Diabetes Australia (2024).

Insight 2: Evidence suggests that the KeepSight program has contributed to more regular and timely optometry visits among people with diabetes.

Insight 2.1: KeepSight reminders work. One in five people who received a KeepSight safety net reminder returned for examination within the recommended period.

From January 2019 to December 2024, KeepSight has indirectly contributed to the successful optometry recall of more than **182,200 optometrist appointments.** Optometry clinics send out their own clinic-specific recall reminders to program participants. However, at 6 weeks and 10 weeks after their next appointment is due, program participants receive an additional 'KeepSight safety net reminder' to encourage them to attend their eye appointment.

KeepSight data shows that **almost 18%(n=66,100)** of program participants return to an optometry clinic within the **successful recall period** (within 60 days of receiving the KeepSight safety net reminder).

However, approximately 43% of program participants receiving the KeepSight safety net reminders never return to a KeepSight-integrated optometry clinic. Given the program does not yet have 100% coverage of optometry, a proportion of these people could have attended a non-integrated provider. In addition, other program participants who have not recalled may be less engaged with their eye health. This represents a call to arms to ensure all optometry providers are integrated to optimise the outcome.

Insight 2.2: KeepSight improves rates of return appointments. Data shows that KeepSight program participants are 20% more likely to return for examination relative to people who are not on KeepSight.

Specsavers provided data which allowed for the comparison of recall effectiveness in people living with diabetes onboarded onto KeepSight and those not registered with the program. Analysis from Specsavers data from 2019 to 2023 found that approximately **75% of people with diabetes presenting to Specsavers were registered with KeepSight.** As the integration of KeepSight with existing patient management systems increases, so will the proportion of people with diabetes registering with the program.

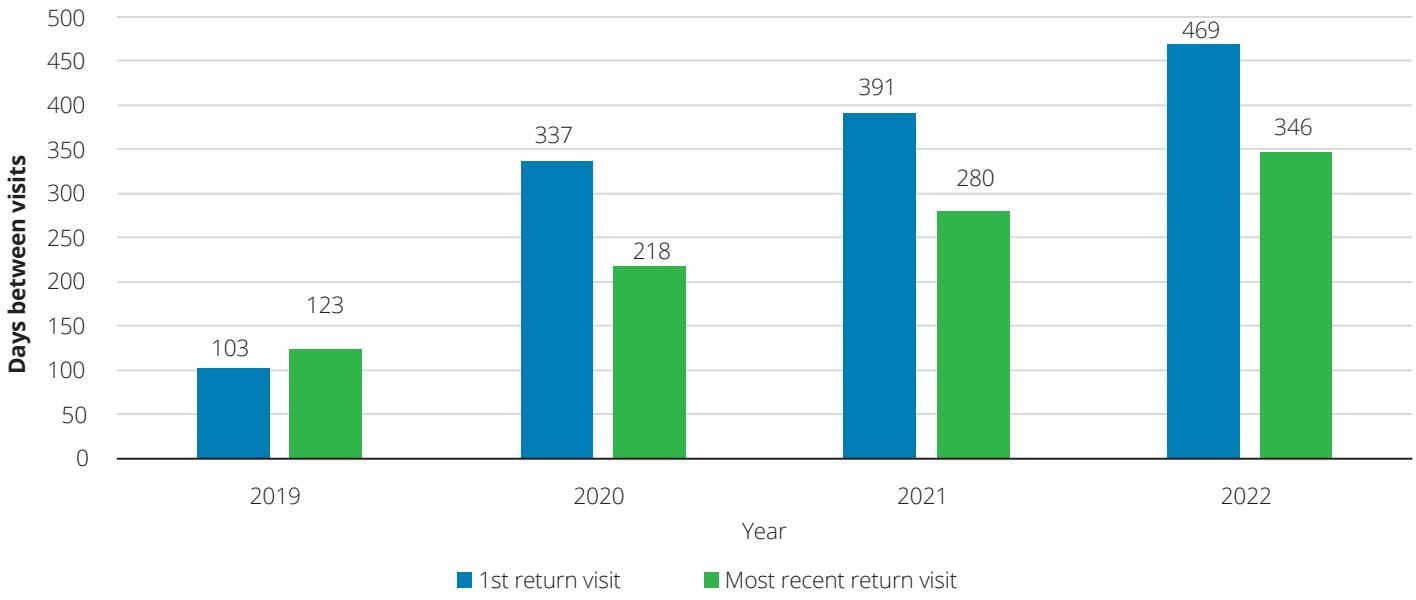
The data also revealed that **program participants are 20% more likely to recall relative to people with diabetes not onboarded onto KeepSight,** and that program participants that recalled, did so 18 days earlier than people with diabetes not onboarded onto the program. A number of limitations should be noted when interpreting these numbers.[37]

This analysis underscores the positive impact of the program on patient recall rates and timeliness, highlighting to some degree the effectiveness in encouraging regular eye check-ups among people living with diabetes. By fostering earlier and more consistent recalls, the program plays a crucial role in ensuring timely eye care, which is essential for preventing and managing diabetes-related retinopathy and complications.

Insight 2.3: KeepSight helps people return on time. For those who do reattend for assessment, KeepSight increases the timeliness of return appointments.

Analysis of KeepSight data also revealed that program participants are more likely to visit an optometrist more regularly after being onboarded with the program. Chart 2.4 shows that the average time between a participant's first return visit and their most recent return visit has decreased across 2020-22. Most recently, program participants from 2022 returned on average 123 days earlier between their 1st return visit and most recent return visit. This may reflect a greater awareness of the importance of visiting an optometrist among program participants, influenced by KeepSight's reminders and communications. It is acknowledged that for some people, where their condition has worsened, there will be fewer days until their next visit. This may have partially contributed to the results in Chart 2.4.

Chart 2.4: Average days between appointments for KeepSight participants



Source: Diabetes Australia (2024).

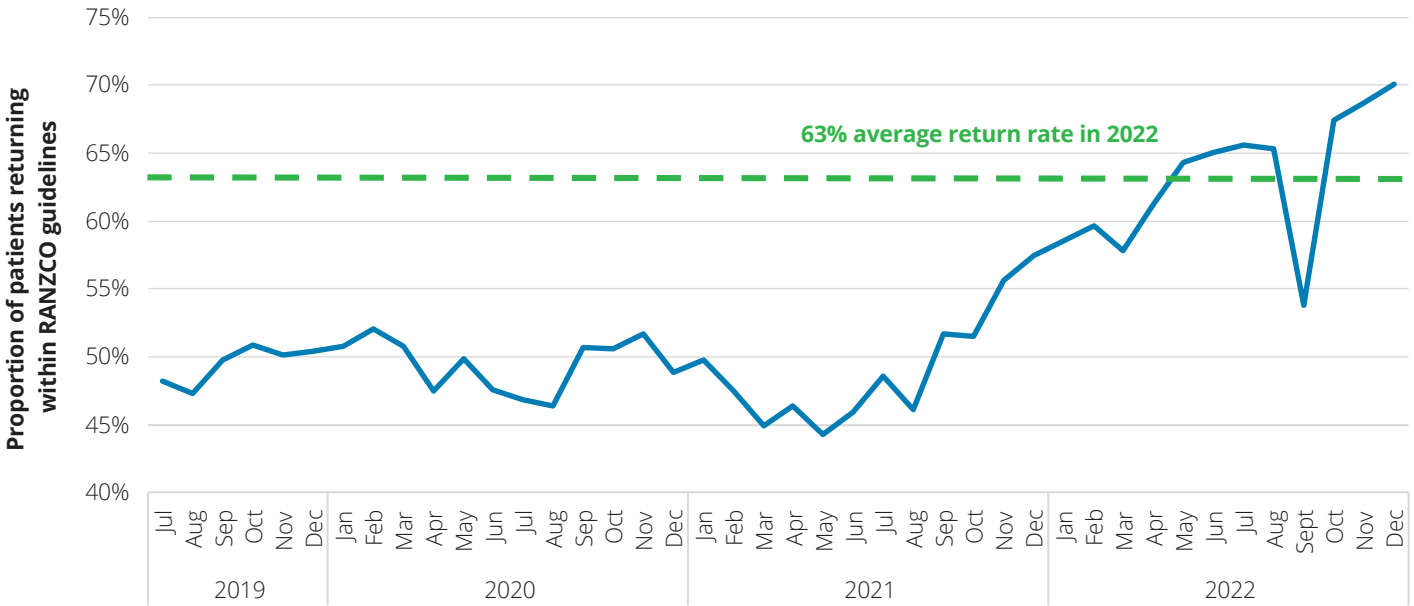
Insight 3: KeepSight participants are more likely to return within RANZCO recommended timeframes. Trends over time show growth in the proportion of KeepSight program participants returning within the recommended timeframes, increasing from 49% in 2019 to 63% in 2022.

RANZCO guidelines recommend screening for diabetes-related retinopathy every two years. Data within the KeepSight dashboard were filtered for an initial visit between July 2019 and December 2022 such that all patients within the database would have had a return visit due by December 2024.

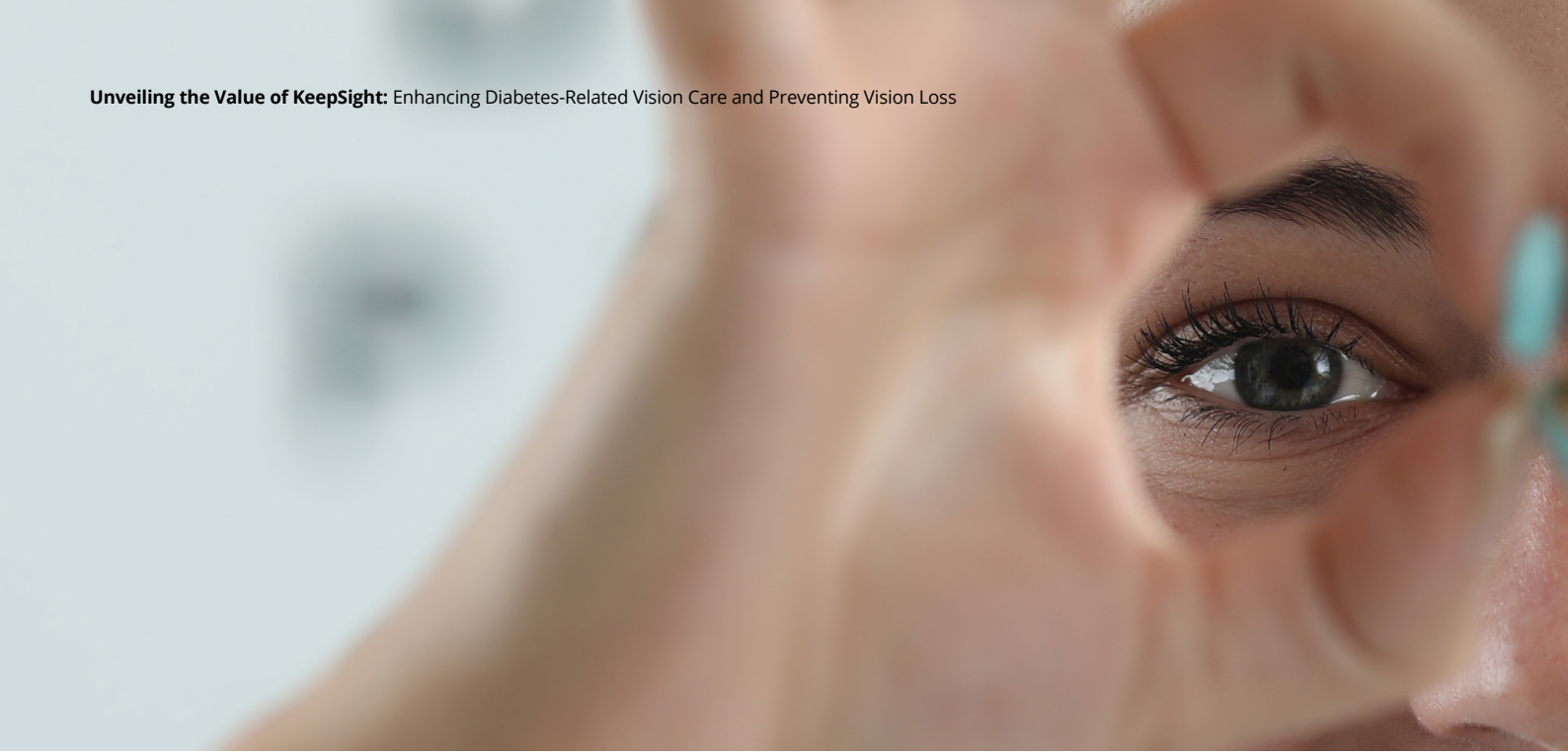
The analysis found that there was a total of 390,021 initial visits recorded, of which **63% of program participants returned within the RANZCO recommended 2-year guidelines in 2022.** Initial results from 2019 (49%) are consistent with anecdotal recordings prior to the introduction of KeepSight.[38] The data analysis undertaken here only includes a sample restricted to visits prior to 2022, so it is likely that this percentage may be higher in the future. This means that over the period of 2019 to 2022, **adherence rates to RANZCO guidelines increased by 14 percentage points.**[39]

Chart 2.5 shows that the return rate for patients with an initial visit in 2022 was higher than previous years (approximately 63% of patients returned).

Chart 2.5: Proportion of patients returning within RANZCO guidelines (May 2019 – May 2022)



Source: Diabetes Australia KeepSight Dashboard (2024).



Insight 4: KeepSight can reduce the cost of eye complications. The economic cost of avoidable diabetes vision loss is up to $5.3 billion per annum. By promoting regular eye checks and timely intervention, KeepSight is contributing to a reduction in these costs in Australia.

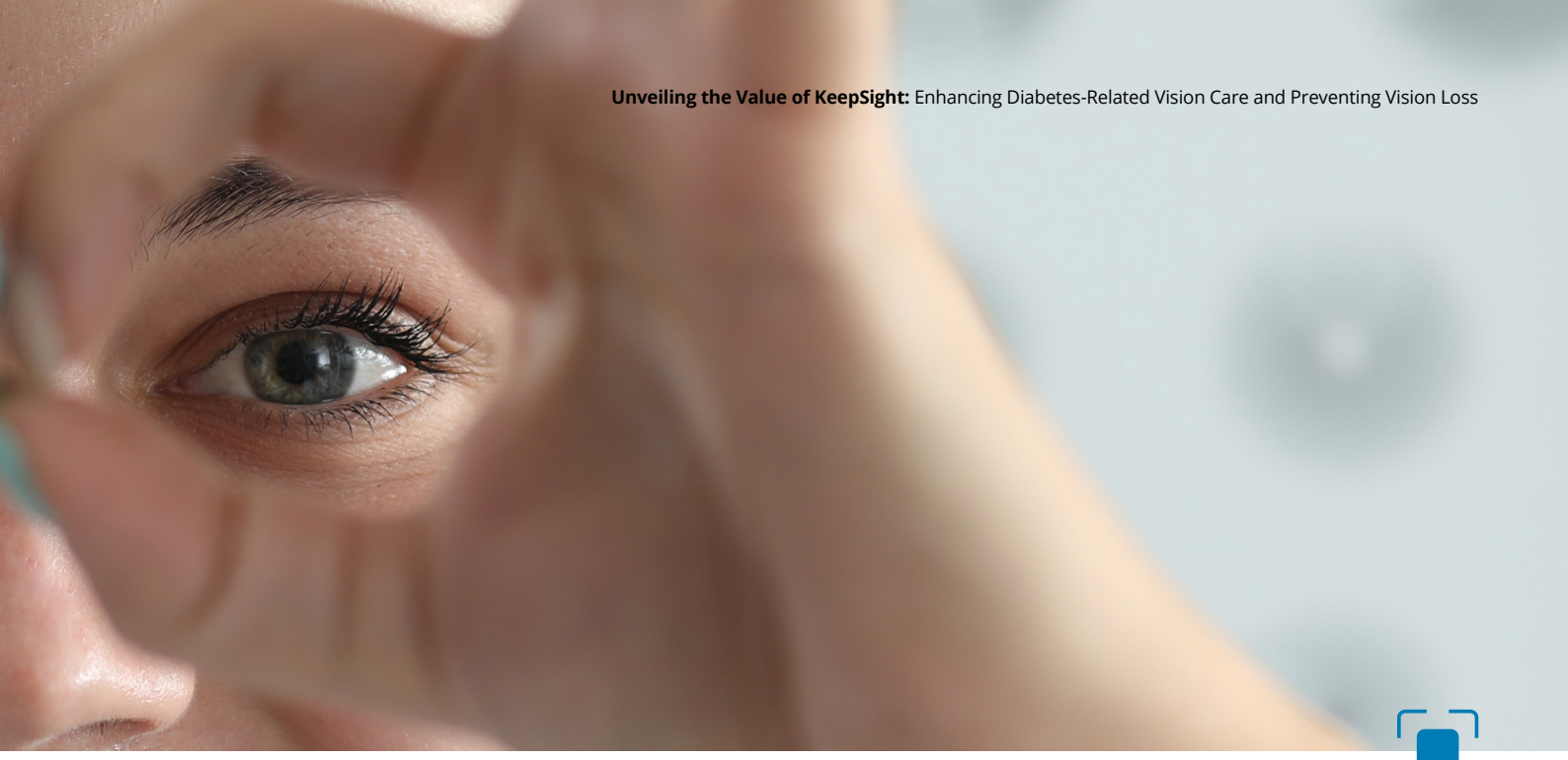
While the full impact of KeepSight is not yet known, it is clear through the analysis of KeepSight data that it has contributed to increased engagement of people living with diabetes to optometry clinics. Although we cannot directly quantify the impact of KeepSight on reducing the economic burden of vision loss, it is clear that KeepSight plays an important role in preventing diabetes-related vision loss.

The impact of diabetes-related vision loss can be observed through an economic lens. Economic impact studies or cost of illness studies measure the economic impact of a disease or condition upon an economy. The key components of an economic cost exercise include measuring the direct health system costs, the indirect costs (such as productivity losses) and the wellbeing impacts (i.e., the burden upon the individual with the condition).
To present an overview of the potential economic cost of diabetes-related vision loss in Australia, a selection of inputs from relevant literature published in Australia was used and inflated to estimate an AUD$2023 figure. Detailed methodology has been outlined in Appendix A.

The estimated **current cost of vision loss caused by diabetes in Australia is up to $5.3 billion per annum.** It is highlighted that this is an indicative estimate only based on publicly available data and does not represent the results of a current cost-of-illness model.

The cost of diabetes-related vision loss is a current estimate of the impact, and these costs can no longer be prevented. However, there is an opportunity to intervene among the population who will develop diabetes in coming years to reduce the likelihood that these people also develop vision loss.

Given that up to 90% of vision loss is preventable and the majority of people with diabetes do not receive eye checks within the recommended guidelines, significant gains could be achieved with behaviour change. If 90% of vision loss is prevented among the cohort of people who will develop diabetes over the next five years, this could result in savings up to **$2.1 billion per annum.** Increasing the coverage of behaviour change programs like KeepSight is key to realising these savings.



3. Conclusion and future considerations.

Prior to the introduction of KeepSight, there was no verifiable or consistent national data available to establish benchmarks for diabetes-related eye care in Australia. The fragmented approach to managing diabetes-related vision care meant that key metrics outlined in this report were not systematically tracked or analysed. KeepSight has navigated uncharted territory by creating a nationally consistent clinical pathway that ensures diabetes status is systematically documented and monitored throughout the eye care journey. This innovation has set a crucial benchmark from which future improvements can be measured. By establishing this foundational framework, KeepSight not only demonstrates significant progress over time but also provides a critical starting point for future advancements in diabetes-related eye health and systemic healthcare strategies.

Diabetes mellitus is a growing epidemic with significant physical, mental, social and financial implications. The complications arising from insufficiently managed diabetes, including diabetes-related retinopathy and vision loss can lead to severe and often irreversible vision loss, which underscores the importance of early detection and intervention.

The program has achieved considerable success in coordinating multiple sectors within a commercial environment, mobilising key players across government, optometry, ophthalmology and peak bodies to collaborate towards a common goal. This collaborative approach has been instrumental in aligning efforts, resources, and expertise to enhance diabetes-related eye care and improve outcomes for people living with diabetes. The program has set new benchmarks in diabetes care by establishing a nationally consistent approach that can be replicated across optometry clinics, setting the gold standard for diabetes-related eye care practices

Additionally, it has introduced a new clinical pathway that ensures diabetes status is systematically documented and monitored. This innovative pathway not only improves the management of diabetes but also enhances the management of eye health, providing a comprehensive framework for better patient outcomes and setting a model for future initiatives.

Over the last five years, KeepSight has been instrumental in promoting regular eye checks among people living with diabetes, thereby facilitating early detection and timely treatment of diabetes-related eye conditions. The continued support and expansion of KeepSight is crucial in achieving its objectives to ensure that all Australians living with diabetes have access to the necessary resources to protect their vision and overall health. A summary of the key opportunities for KeepSight is detailed in Table 3.1.

Table 3.1: Key opportunities for KeepSight

Opportunity	Description
Opportunity 1. Increase overall registration rates among the population living with diabetes	• The increasing prevalence of diabetes in Australia will require a greater need to manage its complications, including the necessity to prioritise eye health due to the high risk of diabetes-related retinopathy and other vision-related issues. • Since its establishment, KeepSight has been well received by people living with diabetes, with currently 31% of NDSS-registered individuals participating in the program. Those joining through alternative pathways represent a crucial cohort, with 29% not having visited an optometrist in the past two years. This highlights the critical opportunity to engage not only all people living with diabetes but in particular newly diagnosed people to KeepSight to prevent complications and promote long-term eye health.
Opportunity 2. Invest in understanding the registration rates across demographic cohorts	• Analysis of KeepSight data shows that participation rates vary according to demographics, geography and age. For instance: – **Geography.** Participation rates in the ACT (62% of people with diabetes) are higher than the national average (35%). At a postcode level, there are disparities in recall and participation rates. – **Age.** There is greater engagement and patient recall among older age groups (35+ years), including rates of registration with the program and recall to the optometry clinic. This is likely because they represent the largest population in KeepSight. – **Priority population.** Indigenous Australians recall at a lower rate than the non-Indigenous population (noting this is likely because they represent just 2% of KeepSight) • There is an opportunity to further analyse this data to understand the drivers behind different levels of uptake and participation across these groups and demographic characteristics, including for example engagement with Indigenous Australians which often require a grass root approach. It is noted that there have been pilot initiatives with Carbal Medical Services in Queensland and a similar project in Karadi (Tasmania) has recently concluded. Such insights could support the development of targeted communications and resources aimed at increasing engagement and participation across different groups.
Opportunity 3. Increase program recall rates	• KeepSight has successfully increased the rate of optometry recall in people with diabetes and there is an opportunity to increase this recall rate even further. Approximately 43% of program participants who receive both the first and second KeepSight safety net reminders do not attend a follow-up appointment at a KeepSight-integrated optometry clinic within the recommended time period. This highlights the need to have more independent practices and optometry groups integrated into KeepSight to achieve 100% coverage across the eye care sector. • While the program alone will not be able to increase the optometry recall rate to 100%, there is an opportunity to better understand the drivers that contribute to lack of ongoing engagement with the program and implement strategies to address these barriers, ultimately improving participation rates and eye health outcomes.

Opportunity	Description
Opportunity 4. Leverage data collection capability to support better policy decisions	• KeepSight captures rich program data as well as the framework to collect clinical data, that once standarised can be leveraged to inform and develop impactful policy decisions, including supporting the efficient allocation of funding, promotion of advocacy efforts in eye care in people with diabetes and support Diabetes Australia's long-term strategic objectives. • The lessons learnt from the program and opportunities to analyse data to understand the drivers of program participation will provide valuational information for other organisations and policymakers both nationally and internationally, such as the World Health Organization [WHO], to allocate resources effectively and create impactful policies for people with diabetes. This includes potential in: – Informing healthcare providers and policymakers in the allocation of funding and development of effective policies – Establishment of a blindness registry in Australia to establish a benchmark for people being diagnosed with preventable vision loss and track clinical outcomes – Advocating for a dedicated Medicare Benefits Schedule item number could incentivise participation and streamline reporting efforts, aligning with WHO targets.
Opportunity 5. Enhance engagement with service providers and introduce new referral channels	• KeepSight has achieved substantial coverage in Australia, having been integrated with approximately 75-80% of larger optometry providers and independents. Expanding the program's reach to include more smaller, independent practices is essential to ensuring all Australians living with diabetes can benefit from a nationally consistent approach to diabetes-related eye care. Avenues to increase coverage in independent optometry clinics include: – Conducting targeted outreach and education for independent providers to demonstrate the benefits of the program and encourage its adoption – Prioritising the integration of the program into all Practice Management software to enable ease of program participation and registration – Enhancing the visibility of data related to independent optometry clinics and their participation in the program. • In addition to increasing engagement with independent optometry providers, there is a critical opportunity to extend the program's reach into new channels and referral pathways, particularly through primary care providers such as GPs and pharmacies. – These channels play a pivotal role in the broader healthcare ecosystem and are often the first point of contact for people living with diabetes. By integrating KeepSight into these settings, the program can enhance early intervention efforts, improve awareness of the importance of regular eye checks, and streamline the referral process for patients who may otherwise not engage with optometry services. – There is also an opportunity to extend into ophthalmology, to reach different cohorts of participants, help track the effects of the eyes, and support patients requiring more intensive management for diabetes-related eye conditions. It is noted steps are already underway to work on a co-designed pathway to support people under treatment.

KeepSight is improving the eye health of Australians living with diabetes. Increased impact can be achieved by increasing registration rates among newly diagnosed individuals, understanding demographic participation patterns, enhanced recall rates, leveraging data for policy development and expanding engagement with service providers. KeepSight can drive substantial improvements in diabetes-related eye care. These strategies not only aim to prevent complications but also promote long-term eye health, ensuring that all Australians living with diabetes have access to necessary eye care services. The insights gained from KeepSight will not only benefit local initiatives but also contribute valuable knowledge to global health efforts and countries with similar prevalence of diabetes in the community.

Appendix A Detailed methodology.

A.1. Methodology approach in estimating the economic impact of diabetes-related vision loss

The impact of diabetes on vision loss can be observed through an economic lens. Economic impact studies or cost of illness studies measure the economic impact of a disease or condition upon an economy. The key components of an economic cost exercise include measuring the direct health system costs, the indirect costs (such as productivity losses) and the wellbeing impacts (i.e., the burden upon the individual with the condition).

To present an overview of the potential economic cost of vision loss caused by diabetes in Australia, Deloitte Access Economics used a desktop scan of key evidence published in Australia, selected appropriate inputs and inflated values to AUD $2023 as appropriate.

Three key parameters were updated, presented in Figure A.1. Multiplying these three parameters together yields an estimate of the economic cost of diabetes related vision loss in 2023. **It is noted that this methodology is not intended to present a definitive value of the impact of diabetes on vision loss, but instead an indication of the potential magnitude. For this reason, these estimates should be appropriately caveated and interpreted with caution.**

Figure A.1: Parameters updated to estimate the economic cost of diabetes related vision loss

Source: Deloitte Access Economics (2025).

The analysis should be interpreted with the following assumptions in mind:

- Prevalence of diabetes in Australia will be estimated to be 1.5 million in 2023 (Australia Institute of Health and Welfare [AIHW] estimates inflated with population growth)[40]
- Proportion of the population with diabetes with vision loss will be assumed to be 7.7% (AIHW estimate of the proportion of people with vision loss)[41]
- Cost per person with vision loss will be assumed to range between $37,700 and $50,000 (lower bound estimate will be based on cost per person of diabetic macular oedema; upper bound estimate will be based on the cost per person of vision loss). Both estimates will be inflated to AUD $2023.

Limitation of the analysis

The methodology does not estimate the impact of vision loss caused by diabetes by condition. For example, individuals with vision loss caused by diabetes-related retinopathy will have different cost impacts to people with cataract. This analysis will assume an aggregate cost for all individuals with vision loss. As the methodology is based on previous cost-of-illness models, the cost per person will be treated as indicative only. A complete cost-of-illness model would be required to provide a true estimate of the current cost per person.

Appendix B Summary of the evidence landscape

B.1. Key characteristics of effective reminder systems

There is clear evidence that reminder systems for appointments are an effective intervention to increase appointment attendance. Characteristics of effective reminder systems to increase the rates of attendance at screening appointments are detailed in Table B.1.

Table B.1: Summary of evidence on effective reminder systems for eye care

Design element	Key finding	Cohort	Location	Source
Appointment lead time	Sending a reminder message closer to the appointment date can help increase attendance	People with diabetes (eye screening)	England	Virk (2020)[42]
Reminder message	Sending messages that highlight the asymptomatic nature of diabetes-related retinopathy	People with diabetes (eye screening)	Global	Graham-Rowe (2018)[43]
	Providing full information about the screening program, including details of how and when the results will be reported to the patient	General health interventions	Global	Graham-Rowe (2018)[44]
	Personalised follow-up phone call/messages can help increase booking of an eye examination	People with diabetes (eye screening)	United States of America (USA)	Salameh (2012)[45]

Source: As indicated in the table.

B.2. Effectiveness of reminder systems for appointments

SMS and email reminder systems are a common behavioural nudge that can promote appointment scheduling, patient recall and minimise missed appointments. A summary of the evidence on the effectiveness of reminder systems for appointments is detailed in Table B.2.

Table B.2: Summary of evidence on the effectiveness of reminder systems for appointments

Reminder type	Cohort	Location	Outcome	Source
Phone reminder for scheduling annual follow-up eye examination	People living with diabetes	USA	Patients receiving a phone reminder to schedule an appointment 10 days following a letter reminder had significantly higher return rates for an annual follow-up eye examination than those patients who received only a reminder letter. This was a 54.7% return rate (within six months of the intervention), compared to a return rate of 27.3% for the control group.	Anderson (2003)[46]
SMS reminder for attendance to pre-booked appointment	People living with diabetes	Rural China	28% increase in attendance at scheduled appointments for follow up in diabetic patients compared to control group. Significant increase in satisfaction and knowledge in intervention group compared to the control.	Chen (2018)[47]

Reminder type	Cohort	Location	Outcome	Source
SMS reminder for screening appointment	People living with diabetes	Australia	Patients who received reminders had more recommended checks than those who didn't receive reminders. This varied from an increase of 0% increase (in eye examinations) to up to 22% (in blood pressure check-ups).	Kumar (2018)[48]
SMS reminder in for appointment attendance	People living with type 2 diabetes (in young people)	Australia	TEXT2U trial - an enhanced SMS text message–based support and reminder program doubled scheduled clinic attendance rates for patients with young-onset type 2 diabetes. The program had no significant effect on measures of metabolic control or self-management.	Middleton (2021) [49]
Email reminder for tele ophthalmology appointment	People living with diabetes	Canada	After the intervention and after excluding patients who said they were screened, 88% (15/17) of patients in the phone, 11% (2/18) in the mail, and 100% (21/21) in the mail and phone group booked an appointment with the teleophthalmology program compared to 0% (0/12) in the control group.	Stamenova (2023)[50]
SMS reminder for screening appointment	People living with gestational diabetes	Denmark	5.9% increase in screening rates of women with gestational diabetes after email for follow-up screening after pregnancy.	Nielsen (2023)[51]
SMS reminder for screening appointment in hard-to-reach locations	Breast cancer screening	Europe	Text-message reminders significantly boosted routine breast screening attendance. The uptake of breast screening was 59.1% among women in the normal invitation group and 64.4% in the text-message reminder group.	Kerrison (2015)[52]

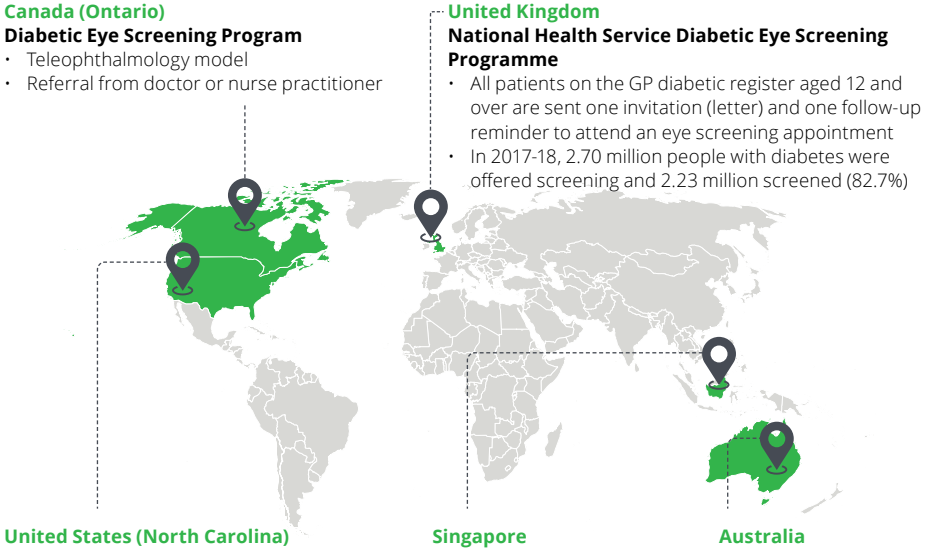
Source: As indicated in the table.

B.3. Eye screening programs

A number of current screening programs aimed at people living with diabetes were identified globally (see Figure B.1). The desktop scan of existing eye screening programs found that most were primarily associated with ophthalmology care (or reducing the burden on specialist care and services) rather than in primary optometry care, where primary prevention occurs.

The NHS Diabetic Eye Screening Programme in the UK, serves as the closest comparison and current benchmark in this field, has influenced the development of KeepSight. However, KeepSight operates within a distinctly different context, functioning within Australia's privately run and commercially oriented optometry sector as opposed to the UK's national public optometry services.

Figure B.1: Current eye screening programs for people living with diabetes



Source: Deloitte Access Economics (2025).

Limitation of our work.

General use restriction

This report was prepared for Diabetes Australia as per the purpose set out in our contract dated 15 November 2023. You should not refer to or use our name or the advice for any other purpose. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity.

End notes

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37. As patients are offered prompted consent into KeepSight there may be selection bias present when comparing program participants with people not registered in the program. This bias will likely result in participants who are more engaged with their health to register into the program whereas people who are less engaged with their health may be less likely to register. This may mean that the increase in recall effectiveness is attributable to self-selection bias rather than the impact of KeepSight. As KeepSight is more than just the KeepSight specific reminders, non-registered patients are also benefitting from the changing clinical pathway following the introduction of KeepSight. For this reason, the comparison between registered program participants and the remaining population with diabetes is not an accurate reflection of the impact of KeepSight. It is noted that no baseline data were available to estimate the recall likelihood for people with diabetes prior to the introduction of KeepSight.

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