

# Let's Fix the Diabetes Pathway: Improving Indigenous Eye Care

## Purpose

The National Indigenous Eye Health Survey (NIEHS) found that 80% of Indigenous adults with diabetes did not have an eye exam in the past year. This finding shows that there is a big gap between what happens along the diabetes eye care pathway and the national guidelines that recommend annual retinal examinations for all Indigenous adults who have diabetes [1, 2].

Coordination of the pathway is required to ensure that those with diabetes are able to access specialist eye care when referral is necessary and receive timely treatment when needed. In addition the NIEHS also found that the prevalence of self-reported diabetes in Indigenous Australians is more than eight times higher than that in non-Indigenous Australians and two thirds of those who needed laser surgery had not received treatment [2, 3].

Other studies in remote regions have also found very high rates of diabetic retinopathy and unmet need for treatment [4, 5]. Given the high rates of diabetes among Indigenous Australian populations and the association of diabetes and related eye complications, it is imperative to fix the diabetes eye care pathway in order to Close the Gap for Vision. The pathway for diabetes involves annual eye checks, examinations and treatment steps that occur across a range of health care settings and involve a number of health and eye care providers (Figure 1).

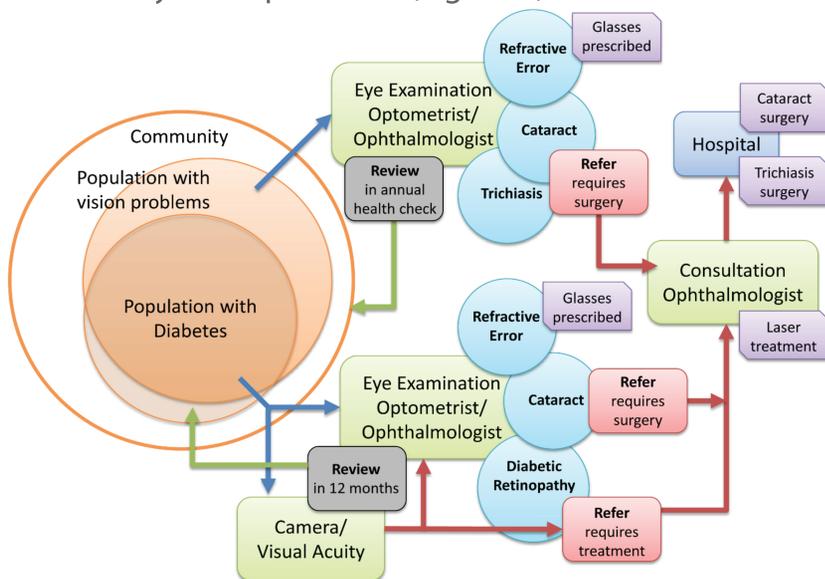


Figure 1: The eye care pathway

## Methods

Data was collected through extensive consultations with eye care practitioners, the Aboriginal Community Controlled Health sector, other primary health care providers and policy makers through stakeholder workshops and semi-structured interviews. These were conducted as part of the barriers to access to eye care project [6].

Workshop and interview participants provided information about models of eye care for people with diabetes, their feedback was collated to form a suite of population-based solutions to improve the eye care pathway for Indigenous adults with diabetes.

The Australian Bureau of Statistics (ABS) 2011 census population data and NIEHS prevalence data were used to estimate the expected needs for diabetes eye care and to estimate the workforce required to address these needs.

## Conclusion

Out of the 42 recommendations to government and health sectors that are outlined in The Roadmap to Close the Gap for Vision, 36 recommendations have relevance to the pathway of care for people with diabetes.

A population-based model to estimate the proportion of Indigenous Australians who have diabetes and need eye care, will facilitate planning for service delivery and workforce requirements to meet the eye care needs of those with diabetes.

The implementation of the solutions will allow timely identification, referral and treatment of diabetic retinopathy for Indigenous Australians.

In addressing the diabetic eye care pathway, we also identify all the elements of care required to meet most of the eye care needs for the whole community (Figure 1).

Fixing the diabetes eye care pathway will go a long way to Close the Gap for Vision.

Table 1: List of solutions to fix the diabetes eye care pathway

|                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Develop prompts for eye care in clinical software used in primary health care services and link these to primary care diabetes management plans                                       |
| Promote the use of information and communication technologies to improve information sharing between primary health services, optometry and ophthalmology services and hospitals      |
| Develop systems for the use of low-cost retinal photography including telehealth to increase retinal assessments for those who have diabetes                                          |
| Develop and implement a population-based model for eye care service delivery and regional eye health networks to improve coordination of the eye care pathway for those with diabetes |
| Conduct regional gap analysis to identify successful models for provision of eye care and determine additional resources required to Close the Gap for Vision                         |
| Establish reporting systems for regional eye health data and monitor performance indicators that include items for diabetic retinopathy treatment                                     |
| Establish mechanism for regional, jurisdictional and national oversight of eye health outcomes                                                                                        |

## Results

Models for the provision of eye care for Indigenous Australians were identified along with some of the barriers (pathway blockages) that limit access to eye care.

A suite of solutions to overcome these pathway blockages were identified (Table 1). The solutions cover actions required at national, jurisdictional and regional levels.

Based on ABS 2011 population data, we estimate the expected population-based need for eye care for those with diabetes for a population of 10,000 people (Table 2).

Table 2: Estimated diabetes eye care and workforce requirements

|                             |        |
|-----------------------------|--------|
| Population (Sample)         | 10,000 |
| No. Diabetes Reviews        | 962    |
| No. Optometry Days          | 121    |
| No. Ophthalmology Referrals | 112    |
| No. Ophthalmology Days      | 33     |

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