Bulletin # 40
October 2017

Indigenous Australia Program

DEVELOPMENT EFFECTIVENESS

WORKING TO DETECT, ASSESS AND TREAT DIABETIC RETINOPATHY

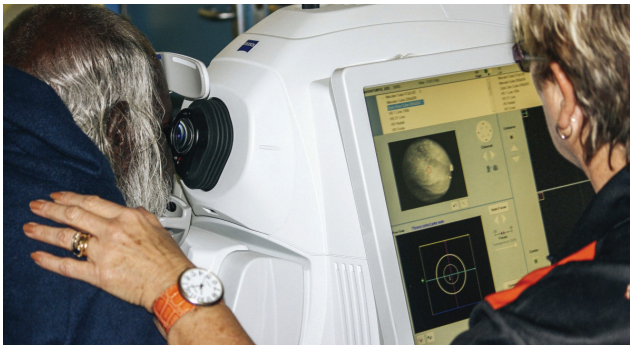
The Indigenous Australia Program (IAP) has invested in projects focused on raising awareness about and improving detection and treatment of Diabetic Retinopathy (DR). DR is the third leading cause of vision loss and blindness for Aboriginal and Torres Strait Islander people. Timely diagnosis (via regular diabetic eye checks or retinal examinations) and treatment are vital to prevent vision loss from DR.

Key achievements

The IAP DR programs have developed and tested components of the model of care for diabetes eye health. This has resulted in over 90 primary health care workers trained, over 1400 retinal examinations and over 190 DR treatments (including laser and vitreo-retinal surgery).

Specifically, the partner-led, IAP supported programs have focused on:

- Patient centric care – by ensuring the right care for Aboriginal and Torres Strait Islander people living with diabetes in the right place
- Equitable access – by reaching remote populations
- Integrated care – by strengthening treatment protocols and referral pathways
- Efficient utilisation of resources – by providing retinal cameras and task-shifting retinal examinations to health care professionals in primary health care (PHC) settings to facilitate more accessible examinations
- Quality, comprehensive care – by developing systems for ensuring examinations lead to treatment, as appropriate.



Screening for DR at Katherine Hospital in the Northern Territory

Direct programming responses

- Diabetic Retinopathy Screening Trial (2012) - The project gave PHC workers the skills and resources required to conduct retinal examinations as part of diabetes health checks / chronic disease management plans.
- Pilbara Diabetic Eye Care Program (2014-2016) - This project involved integrating retinal screening into well-established optometry and ophthalmology services in the Pilbara region of Western Australia.
- Integrating DR screening into chronic disease model of care (2015 – present) - This project involves supporting the Sunrise Health Service (SHS), an Aboriginal Community Controlled Health Organisation in the Northern Territory, to integrate DR detection into their existing chronic disease management (CDM) process.
- Eye Health Coordination Project (2015-present) - With funding from the IAP the Nganampa Health Council (NHC) employs a full-time eye health nurse and purchased a retinal camera to coordinate DR services. The NHC is also documenting all Medicare income generated from item 12325 with a view to understanding whether this revenue will be sufficient to fund eye health positions in the future.

The Fred Hollows Foundation
Indigenous Australia Program
08 8920 1400 | reception@hollows.org | www.hollows.org

The Fred Hollows Foundation
www.hollows.org

Complementary activities

In addition to these direct programming responses, the IAP is seeking to strengthen eye care systems. Many of the IAP initiatives with this aim include discrete activities that facilitate or enable early detection, assessment and/or treatment of DR.

Central Australian Barkly Integrated Eye Health Strategy (CABIEHS)

CABIEHS has been investigating options for integrating and improving eye health information systems across service providers in the region. This work involves a review of how PHC providers can upload retinal images for review by ophthalmologists

Getting equipment in the right place

- In 2014, the IAP entered an agreement with the Australian Government Department of Health to purchase specialised ophthalmic equipment. One of three DRS retinal cameras were provided to Derbal Yerrigan (an Aboriginal Medical Service in Perth).
- In 2015, the IAP donated an IOL Master and OCT Machine to the Top End Health Service to replace existing ophthalmology equipment that was sent to the Gove District Hospital.

Two training participants from the Sunrise Health Service pack the DRS camera into the back of the car ready for outreach.

National eye care equipment inventory project (NECEIP)

The Australian Department of Health engaged the IAP to work with health services to catalogue existing eye care equipment in PHC facilities in regions that have a high proportion of Aboriginal and Torres Strait Islander people. This information will assist in identifying sites for the: placement of new retinal cameras and slit-lamps; maintenance of existing equipment, and; provision of training. The overarching purpose is to assist with the uptake of two new MBS items designed to enable easy eye screening in PHC settings.

Knowledge translation and exchange

The IAP and the Australian Indigenous HealthInfoNet developed an evidence-based diabetic retinopathy factsheet and animated infographic. These resources were designed to inform practice among PHC providers caring for Aboriginal and Torres Strait Islander people with diabetes and support health education.

Coordination and culturally appropriate patient support

The IAP experience suggests that investment in a coordination workforce results in the improved uptake of eye care services; improved continuity of care for people with diabetes and DR; and increased health literacy amongst people with diabetes. The IAP has also funded a number of Indigenous Liaison Officer (ILOs) positions. Anecdotal accounts indicate that ILO involvement in eye care improves communication between patients and eye care professionals and reduces 'no-show' or non-attendance rates for eye health services.

Learnings and Opportunities

Service delivery:

- Partner capacity limited the full implementation of some projects. Current efforts to enhance capacity assessments will help the IAP to identify all of the enablers and barriers to the implementation of integrated diabetic eye care. Assessment results will inform program design and delivery in future.
- Well-coordinated optometry and ophthalmology services in the WA supported the delivery of treatment for people identified with DR. These services successfully used telehealth. Lessons learned from the WA-based project will inform future IAP programming and advocacy actions for enhanced diabetic eye care through telehealth.
- It is important to continue documenting the benefits of the coordination workforce. The evidence generated will contribute to advocacy efforts to secure sustainable funding for eye care coordination roles in the future.
- To potentially streamline the review of retinal images and referrals, the IAP is interested in investigating the use of retinal image grading software.
- To ensure diabetic eye care is available to all target populations, retinal cameras may need to be transported to satellite clinics. Where appropriate, arrangements need to be made to ensure cameras are portable (e.g. custom made hard cases).

- With the introduction of MBS item 12325, enabling general practitioners and specialists managing patients' diabetic care to test for diabetic retinopathy with a non-mydriatic retinal camera, there will continue to be opportunities to work with partner organisations around how best to use this mechanism to introduce or increase retinal screening in a sustainable and cost-effective way.
- PHC workers participated in an instructor-led diabetes retinal photo-screening course. Flexible training media (such as DVDs or online sessions) may be required to ensure health services retain the capacity to conduct retinal examinations despite staff turnover.

Within The Foundation:

- The IAP programming responses have been localised. With a view to adopting a health systems strengthening approach, there is an opportunity to determine whether and how local lessons might be applied at a regional, state and national level.
- Program implementation revealed the high workplace demands on PHC workers reduced their ability to incorporate retinal examinations into their everyday practice. The IAP will explore other avenues to support the integration of diabetic eye care into standard practice routines.
- Our analysis of the eye health needs will be strengthened by the efforts of governance structures, like CABIEHS, to identify and obtain timely local and regional data on the prevalence and incidence of diabetes and DR.
- An opportunity exists for the IAP to investigate and possibly adopt the quality standards under development by The Foundation by which DR programs can be planned, delivered and measured.
- The establishment of the Policy, Advocacy and Engagement team within the IAP will enable the pursuit of other priorities within the Diabetic Eye Health Strategy such as local advocacy to build a commitment to diabetic eye care.

The IAP presents a camera to the Sunrise Health Service representative

Challenges

To strengthen the evidence base the IAP needs to demonstrate the outcomes, impacts and cost-effectiveness of DR programs. While the IAP has sought to embed sound monitoring and evaluation into project design, limited partner capacity and/or competing priorities within partner organisations have contributed to delays in the conduct of timely evaluations.

Given the importance of generating evidence on the suitability and effectiveness of components of care and of the model of care as a whole, the IAP will work with partner organisations to implement monitoring and evaluation approaches appropriate to the project context. Innovative solutions will be sought to challenges faced in the past. For example, project officers may be embedded within partner organisations to establish a baseline and collect, analyse and use information to track a project's progress toward desired objectives.

Future directions

- IAP will continue to work with partner organisations to integrate eye care into diabetic patient care and ensure that care is well coordinated between the various service providers. Lessons learned from previous projects will inform these efforts. Monitoring and evaluations will also be conducted to demonstrate the outcomes and impacts of DR programs.
- Operational research in DR programming will be included in the research strategy for 2018. Research projects under consideration include measuring the cost effectiveness of retinal examinations in PHC settings as compared to other settings and investigating the effectiveness of task-shifting retinal examinations to 'non-eye' health professionals. Generated evidence will be used to support policy and advocacy actions designed to embed and coordinate the detection, assessment and treatment of DR.

More information can be found in the report titled 'Working to detect, assess and treat diabetic retinopathy in Aboriginal and Torres Strait Islander populations' (September 2017) and development effectiveness bulletin No. 8 titled 'Diabetic Retinopathy Screening Trial' (May 2014).