

# Providing eye care to remote Indigenous communities in the Northern Territory: a case study examining success factors and challenges from a collaborative approach between a NGO and AMS

**Tricia Keys<sup>1</sup>, Maree O'Hara<sup>2</sup>**

<sup>1</sup>International Centre for Eyecare Education, <sup>2</sup>Anyinginyi Health Aboriginal Corporation

## Abstract

### Background

There are many barriers to Indigenous people seeking eye care. A lack of funded services within Indigenous and non-Indigenous controlled facilities has long been recognised as a major barrier. Other barriers include perceived cost, transport and access difficulties, lack of eye health awareness, and lack of eye care practitioners with knowledge of Indigenous culture. A Northern Territory Aboriginal Medical Service (AMS—Anyinginyi Health Aboriginal Corporation) invited a Non Government Organisation (NGO) to help overcome these barriers in 2006.

### Services provided

Regional Eye Health Coordinators (REHCs) screen their communities for eye conditions, and coordinate and facilitate the eye health program in their region. They are a fulcrum around which effective services can be accessed by Indigenous people.

The NGO has worked with the AMS and REHC to achieve the following:

- training for REHC (both on the job and structured training courses)
- increased community awareness of the need for eye health services
- REHC coordination of optometric services with the community
- optometrists providing comprehensive eye examinations
- spectacle supply through a low cost scheme
- established referral pathways to other health professionals.

### Results

Prior to this collaborative approach, anecdotal evidence from the REHC and regional ophthalmologist suggest that eye care was limited in the region serviced by this AMS. The same people report a large increase in services since the program started. In 2007–2008, 1385 patients were seen with 734 being prescribed spectacles and 146 referred to specialist care.

Access to spectacles has been improved with a Low Cost Spectacle Scheme and arrangements with Centrepay which allow payment for prescribed spectacles via Centrelink deductions. This payment system has increased the number of custom made spectacles paid for from 51.5% to 82%.

## Challenges

Cultural reasons and adverse weather can necessitate last minute schedule changes, so flexibility is important. Such logistical problems mean it is essential to work closely with the REHC.

Project success was gained not only from the prominent and pivotal role of the REHC, but also through continuity of optometrists. While continuity gained respect and admiration from community members and health centre staff, locum optometrists were required to expand the program. Systems and protocols have been developed to decrease dependence on individuals.

## Conclusion

Cooperation and collaboration between optometrists, AMSs and REHCs has been key to the success of the program, enabling it to overcome the existing barriers to eye care and improve access for people in need.

## Introduction

### Background

While much focus is given to the direct causes of reduced Indigenous life expectancy, the eye health status of Indigenous people is a significant issue. Long-term collaborative approaches with multi-level strategies are options to improve eye health outcomes, and may facilitate broader health benefits for Indigenous people. As part of a collaborative approach to improving Indigenous eye health outcomes, the International Centre for Eyecare Education (ICEE) has been working with the Aboriginal Medical Services (AMS) and other Indigenous health bodies to provide optometry services and eye health education programs for Aboriginal Health Workers. This program began in New South Wales in 1999, and was extended into the Northern Territory in 2006 on invitation from Anyinginyi Health Aboriginal Corporation, (AHAC) and the Regional Eye Health Coordinator (REHC). This collaborative program now oversees delivery of eye care to 11 locations around Tennant Creek and the Barkly Region.

The aim of this project is not only to increase accessible eye care services to remote and isolated Indigenous communities in the Barkly region of the NT, but also to provide them in a culturally appropriate way.

### Indigenous eye health

Indigenous peoples face many barriers when accessing general health services<sup>1,2</sup>, and attend eye care practitioners in proportionally far lower numbers than other members of the Australian population<sup>3</sup>. Barriers to Indigenous people seeking eye care include perceived cost, transport and access difficulties, lack of eye health awareness, and lack of eye care practitioners with an understanding of Indigenous culture.<sup>4-6</sup> It has long been recognised that there is also a need for more funded eye care services within Indigenous controlled facilities.

A review of Indigenous eye health in 1997<sup>4</sup> highlighted disparities when it reported that in some communities, blindness occurred up to ten times more frequently in the Indigenous population than the non-Indigenous.<sup>4</sup> The 2004-05 National Health Survey reported that eye problems constituted 30% of all long-term health conditions affecting Indigenous people, making them the most common of all conditions.<sup>7</sup>

While recent data detailing the vision problems in Indigenous communities are limited, leading causes of vision impairment are thought to be refractive error, cataract, diabetic retinopathy and trachoma.<sup>5</sup>

## Regional Eye Health Coordinator

Regional Eye Health Coordinators (REHCs) play a significant role in coordinating and providing culturally appropriate eye care services—linking the Indigenous population and communities with specialised services from optometry and ophthalmology. The need for such a role was confirmed in 1998 after the Australian government implemented the National Aboriginal and Torres Strait Islander Eye Health Program. The Office of Aboriginal and Torres Strait Islander Health (OATSIH) now funds 29 such positions across the country, with each based within an Aboriginal Medical Service (AMS).

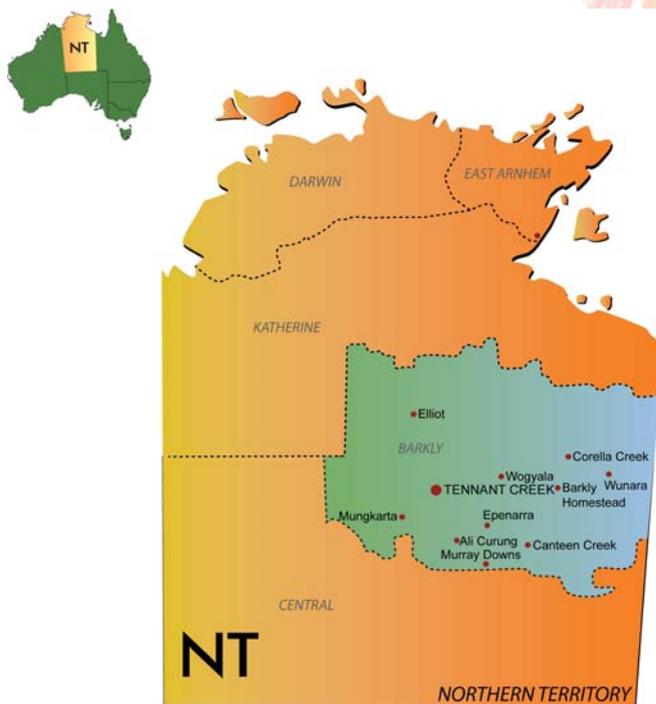
AMS' play a critical role in contributing to the better health of Indigenous people, and has led to improvements in access to appropriate primary health care services.<sup>8</sup>

## International Centre for Eyecare Education

Founded in 1998, International Centre for Eyecare Education (ICEE) is a not-for-profit, development organisation working in the field of blindness prevention and vision correction. ICEE's mission is to eliminate avoidable blindness and impaired vision particularly due to 'uncorrected refractive error' or simply the need for glasses. ICEE's work is particularly focused on assisting communities in need to improve their capacity to deliver quality eye care programs. In Australia ICEE works with partners to develop eye care programs that meet the needs of the Indigenous population, with a focus mainly on New South Wales and the Northern Territory.

## Anyinginyi Health Aboriginal Corporation

Anyinginyi Health Aboriginal Corporation (AHAC) is the primary health care provider and advocate for the community service needs of Indigenous people around Tennant Creek. This AMS was incorporated in 1984, and now services an area of approximately 337,500 sq kms across the Barkly Shire, as shown in the map below. Whilst the services are mainly intended for Indigenous people, non-Indigenous people are also welcome. The eye health program is part of the public health unit. The other main areas of AHAC are the Health Centre, Regional Remote Health Services, Stronger Families Program (Piliyintinji-ki) and Sports and Recreation.



## Visiting Optometrist Scheme (VOS)

The VOS exists to encourage optometrists to provide services to people living in rural and remote areas, by providing an extra monetary payment. Certain towns and Indigenous communities have been highlighted by the Department of Health and Ageing as areas of special need, and applications allow approved optometrists to claim for a proportion of their expenses including: travel costs; equipment transport; facility fees; absence from practice allowance; administrative support; and cultural training.<sup>9</sup>

## Methods

A new REHC was recruited to AHAC in May 2006 to coordinate eye care activities in the Barkly region. As the position had been vacant for a while, the REHC used this opportunity to assess and re-structure the services provided. There were infrequent visits from optometrists out of Alice Springs and Sydney, with a limited spectacle supply.

A good working relationship was re-established with the visiting ophthalmologist from Alice Springs, who visits Tennant Creek for approximately 1 week every 2 months.

In September 2006, the REHC contacted ICEE for assistance in providing regular optometry services to Tennant Creek and Indigenous people throughout the Barkly region, and to establish a Low Cost Spectacle scheme to provide affordable spectacles to the Indigenous population.

Uncorrected refractive error is the most common cause of distance vision impairment in the world, and is estimated to cause about 150,000 Australians to be vision impaired.<sup>10</sup> Uncorrected presbyopia, blurred vision at near in older people who don't have reading spectacles, is estimated to cause impaired near vision in up to 1 million Australians.<sup>9, 11</sup> It is evident from these numbers that any program aiming to improve vision status will require an appropriate supply of spectacles. Custom-Made Spectacles (CMS) can be expensive but are required to correct complex refractive errors, or even simple refractive errors perfectly. Ready-Made Spectacles (RMS) are cheap but only provide an approximate correction for most refractive errors.

## Results

### Increased Optometric Services to Tennant Creek and the Barkly

The initial 2 years of the program saw 2 optometrists spend an average of 1.5 weeks in the Barkly each quarter year. The partnership and use of locum services has enabled optometry coverage in the Barkly region expand from 7 days per year prior to ICEE's involvement in 2006 to 78 days in 2008.

For the first eighteen months there was continuity in at least one of the optometrists attending. This enhanced the success of the program, as professional relationships were built between ICEE, AHAC and the visiting ophthalmologist; and the REHC and ICEE optometrist/manager put systems in place to improve patient data, referral pathways and spectacle coordination, plus continuity of care gained respect and admiration from patients and community members. Such systems and protocols will decrease dependence on individuals, as the program continues to grow, and ICEE utilises locum optometrists.

The collaboration between ICEE and AHAC has not only seen an increase in services but also an improvement in data collection. In 2007–2008, 1385 patients were seen with 734 being prescribed spectacles and 146 referred to specialist care. A summary of all eye examinations is provided to the Central Australia Eye Health Group, and entered into a database which the ophthalmologist and REHC

have access to. This enhances follow-up of care and the effectiveness of referral pathways, and enables timely access to previous health records from any location.

### **Culturally appropriate service provision**

ICEE and AHAC both recognise the importance of providing cultural appropriate services to Indigenous communities. ICEE strives to ensure that all optometrists are well briefed and familiar with local customs prior to their outreach services. Building on their extensive experience in providing eye care service to Indigenous communities, ICEE has developed a manual: "Standard Operating Procedures and Guidelines for Optometrists working in NT Communities". This document contains information on cultural awareness and behaviour, which was contributed to by the REHC. All optometrists are trained with this document prior to any community visits.

The REHC, who is integrally involved in arranging and implementing all outreach services, also briefs optometrists as required, and ensures the optometrists are always accompanied by either the REHC and/or an Indigenous AHAC staff member.

### **Spectacle supply**

ICEE set up a Low Cost Spectacle Program to provide affordable CMS to Indigenous people and other people living in remote areas for as little as \$35. The REHC sells RMS to patients with simple optical requirements for \$4, but will not sell these to anyone who has not had an eye examination within two years, and uses this opportunity to arrange appointments.

Costs recovered through the sales of RMS, partially subsidise sunglasses purchases made by REHC. These sunglasses are provided free of charge to all patients who receive a dilated fundus examination, providing protection to the eye whilst the effect of the drops are wearing off.

ICEE is registered with "Centrepay", which allows patients to pay for their spectacles by instalments taken directly from their Centrelink payments. Registering with Centrepay in August 2007 has seen an increase in the number of patients returning to pay for and collect their CMS in the Barkly region from 51.5% pre-centrepay, to 82% post-centrepay.

ICEE is also registered with the Northern Territory Pensioner and Carer Concession Scheme (NTPCCS), which allows eligible patients to obtain free spectacles.

### **Increased community awareness of eye care services**

Building on her experience in Indigenous communities and training by ICEE, the REHC has continued with a number of initiatives to increase awareness amongst the community of eye health, vision conditions and the need for regular eye examinations. These include providing vision screenings to adults during public events such as the Tennant Creek Show; and to children that attend the local schools and childcare services.

### **Eye health training for the REHC**

ICEE has been running eye health and vision care education workshops for Aboriginal Health Workers in NSW since 2000. A National Eye Health Demonstration Grant from the Australian Government funded ICEE to deliver similar courses in the NT during 2008 and 2009. Successful and sustainable solutions require knowledge and skill transfer through education.

## Established referral pathways

The systems and quality of care have been improved by the REHC acting as the fulcrum around which all eye care services in the region operate. Priority for optometry services is given to groups most in need, namely Indigenous people, people with diabetes, children and the aged. She has encouraged collaboration and integration of services, established an efficient database for patient recalls and referrals, and has developed skills to discuss patient signs and symptoms with optometrists or ophthalmologists to decide whether urgent referral is required.

## Challenges

The alignment with Centrepay is providing a much needed service to patients and making glasses more accessible. However, the processing fee, approximately 10%, charged by Centrepay, cannot be passed onto the patient, but instead absorbed by ICEE

There are consistently large numbers of patients who do not turn up for their appointments at AMS' such as AHAC. To overcome this, the REHC double books most appointments, with all patients receiving a letter confirming their appointment, most of which are hand delivered to houses. On clinic days an Aboriginal Liaison Officer (ALO) and/or clinic driver are used to assist in finding the patients for their appointments.

A degree of adaptability is required. On several occasions clinic numbers have been reduced or cancelled, due to reasons outside the control of ICEE or AHAC. Such reasons have included: a death in the community; road closures due to wet weather; road closure due to a road train overturning on the highway. In such instances, respect and understanding must be shown.

## Conclusion

ICEE and AHAC have established a successful program to increase the delivery of culturally appropriate eye care services to Indigenous people in the Barkly region. This success has resulted in ICEE expanding its service Territory wide, on invitation by other NT AMS'. ICEE now works in all 5 eye health regions of the NT, and regularly services 33 Indigenous communities.

The successful strategies implemented in the program to overcome the barriers affecting availability of eye care to rural and remote Indigenous people are listed in the table below:

Barriers	Successful strategies
Transport and access difficulties	<ul style="list-style-type: none"> <li>Continuation of REHC to organise clinics, ensure clinics are promoted, conduct vision screenings</li> <li>ICEE optometrists provide a locum style service at the AMS and Community health centres</li> <li>Mobile optometric services provided to small, remote communities</li> <li>Continued referral pathways to ophthalmologist at regional hospitals in Tennant Creek and Alice Springs</li> </ul>
Lack of culturally appropriate services	<ul style="list-style-type: none"> <li>Increased eye clinics occurring in AMS or community health centre</li> <li>REHC is the fulcrum around which the service operates, and provide cultural link between optometrist and Indigenous patient by providing translators or ALOs as required.</li> </ul>
Perceived cost of spectacles and eye examinations	<ul style="list-style-type: none"> <li>Spectacles are continued to be provided free-of-charge via the Northern Territory Pensioner and Carer Concession Scheme, where applicable</li> <li>ICEE has established a 'Low Cost Spectacle' program</li> <li>The REHC stocks a supply of Ready Made Spectacles.</li> <li>Eye examinations are bulk-billed to Medicare</li> <li>The Australian Government funded, Visiting Optometrist Scheme [13] assists in covering the travel expenses incurred by ICEE</li> </ul>

## References

- [1] Ivers R, University of S. Issues Relating to Access to Health Services by Aboriginal and Torres Strait Islander People: Dept. of Public Health and Community Medicine, University of Sydney 1997.
- [2] Urbis Keys Young. Aboriginal and Torres Strait Islander Access to Medicare and the PBS. Sydney: Health Insurance Commission; 1996.
- [3] Hecker R. A Review of Eye Health Services for Aboriginal Communities in NSW: Office of Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Family Services; 1998 September 1998.
- [4] Taylor H. Eye health in Aboriginal and Torres Strait Islander communities. Uwankuru palya ngalkapai—better vision for all. Report of a review commissioned by the Commonwealth Minister for Health and Family Services, the Hon Dr Michael Wooldridge. Canberra: : Commonwealth Department of Health and Family Services; 1997.
- [5] Commonwealth of Australia. Eye health in Australia: A background paper to the National Framework for Action to Promote Eye Health and Prevent Avoidable Blindness and Vision Loss. Canberra: Department of Health and Ageing; 2005 November 2005.
- [6] Wildsoet C, Wood J. Primary eyecare needs and services to Aboriginal and Torres Strait Islander populations across Queensland; a 'users' perspective. Clin Exp Optom. 1996;79(5):188-201.
- [7] Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Health Survey 2004-05. Canberra: Commonwealth Government of Australia 2006.
- [8] NATSIHC. National Strategic Framework for Aboriginal and Torres Strait Islander Health: Framework for action by Governments,. Canberra; 2003.
- [9] Commonwealth Government of Australia—Department of Health and Aging. Visiting Optometrists Scheme. 2008 <<http://www.health.gov.au/internet/main/publishing.nsf/Content/ruralhealth-vos>> accessed 02/05/2009.
- [10] Resnikoff S, Pascolini D, Mariotti SP, Pokharel GP. Global magnitude of visual impairment caused by uncorrected refractive errors in 2004. Bull World Health Organ. 2008;86(1):63-70.
- [11] Holden BA, Fricke TR, Ho SM, Wong R, Schlenther G, Cronje S, et al. Global vision impairment due to uncorrected presbyopia. Archives of ophthalmology. 2008 Dec;126(12):1731-9.

## Presenters

**Tricia Keys** works at the International Centre for Eyecare Education (ICEE). She graduated from the School of Optometry, UNSW in 2006 and has worked in private practice around Australia, primarily in Sydney and Darwin. Her involvement in eye care delivery to Aboriginal communities, and voluntary work in Nepal, lead to an interest in public health optometry. Tricia commenced employment for ICEE as a Program Optometrist in June 2006. She is currently ICEE Project Manager—Aboriginal Eyecare, and is enrolled in MPH.

**Maree O'Hara** works at the Anyinginyi Health and Aboriginal Corporation (AHAC). She is a registered nurse who has 20 years' experience in Aboriginal affairs in Queensland and Northern Territory, working in the health, education and employment sectors. Maree has worked for AHAC in different capacities: as a Clinical Lecturer for Aboriginal health workers and as Barkly Eye Health Coordinator since 2006. This involves organising and running optometrist and ophthalmologist clinics across a region that is 330 000 sq km (larger than Victoria!) and organising surgery for patients in Tennant Creek and Alice Springs. Thus coordinating the whole experience.