Towards 2020

A Plan to Eliminate Avoidable Blindness and Vision Impairment in our Region

June 2010

National body working in partnership to prevent avoidable blindness and improve vision care
Towards 2020 has been developed by Vision 2020 Australia in consultation with members of Vision 2020 Australia’s Global Committee. Organisations represented in the Global Committee are:

CBM Australia
Centre for Eye Research Australia
Foresight Australia
International Agency for the Prevention of Blindness
International Centre for Eyecare Education
Lions Australia
Royal Institute for Deaf and Blind Children
Royal Australasian College of Surgeons
The Fred Hollows Foundation
The Royal Australian New Zealand College of Ophthalmologists

Special thanks go to Professor Hugh Taylor, Professor Jill Keefe, Associate Professor Richard Le Mesurier, David Lewis, Virginia Sarah and Gerd Schlenther for their valuable assistance.
Towards 2020 provides an overview of progress under the Avoidable Blindness Initiative, and illustrates how the next phase of Vision 2020 Australia’s Plan to Eliminate Avoidable Blindness and Vision Impairment in our Region will be implemented with a further commitment of $475 million from 2012–2020.
Executive Summary

Avoidable blindness is a major public health issue. Globally, approximately 400 million people are blind or vision impaired, with great costs to individuals, families, communities and nations. Eighty per cent of all blindness is preventable or treatable, and research has shown that interventions to improve eye health are essential in reducing poverty and achieving the Millennium Development Goals.

Australian Non Government Organisations have a long history of tackling avoidable blindness in developing countries. In 2007, recognising this expertise and the importance of eliminating avoidable blindness, the Australian Labor Party announced a $45 million Avoidable Blindness Initiative to tackle blindness and vision impairment in the Asia Pacific. Since then, Vision 2020 Australia’s Global Consortium, comprised of nine leading eye health agencies, has been launched, and a Partnership Framework has been developed with AusAID to ensure effective implementation of Avoidable Blindness Initiative activities. Programs are underway throughout the Asia Pacific, and Australia has expanded its leadership role in this field.

The Regional Plan is based on a model developed by VISION 2020: The Right to Sight which has shown in a variety of contexts to effectively and sustainably eliminate avoidable blindness. It outlines how funding of $600 million over 10 years will comprehensively address the issue of avoidable blindness in Australia’s region. Taking into account funding so far by the Australian Government, by eye care agencies and by governments in the region, Towards 2020 updates this figure and concludes that, with a funding commitment of $475 million from 2012-2020, Australia can eliminate avoidable blindness and improve the lives of hundreds of millions of people in the Asia Pacific.

The Avoidable Blindness Initiative is based on the first phase of Vision 2020 Australia’s 10 year Plan to Eliminate Blindness and Vision Impairment in our Region (‘the Regional Plan’). The Regional Plan adopts a multifaceted approach to improving eye health, focusing on areas including the establishment of appropriate national plans, human resource development to ensure that public health systems have sufficient numbers of appropriately skilled eye health personnel, interventions to treat cataract and other blinding conditions, and the development of infrastructure and information systems.
Worldwide, approximately 400 million people live with blindness and low vision caused by uncorrected distance refractive error, eye diseases and other conditions.\(^1\) Additionally, functional presbyopia, experienced by people who cannot see clearly at near, affects more than 1 billion people, 517 million of whom do not have adequate nearvision correction. Significant near vision disability is experienced by 410 million people.\(^2\)

Vision impairment and its associated costs will rise dramatically through to 2020.\(^3\) Ninety per cent of the world’s blindness exists in developing countries, and over half of all blindness occurs in the Asia Pacific. There are clear links between poverty and blindness, and the elimination of avoidable blindness is an important step in achieving the Millennium Development Goals (see Appendix 5). Two thirds of blind people are women, and globally around half a million children become blind every year. Up to 60 per cent of children in low income countries die within two years of becoming blind.

Interventions to improve or restore sight are among the most cost-effective of all public health programs.

A study published in the *American Journal of Ophthalmology* in 2003 demonstrated that savings to national health budgets of US$223 billion could be achieved globally from 2000-2020 if VISION 2020 was successful.\(^4\) The World Health Organisation has identified cataract surgery as one of the most cost-effective public health interventions that can be carried out.\(^5\) In addition, studies have shown that the provision of low-cost, appropriate glasses would enable millions to see and contribute productively to their communities.

Crucially, with today’s knowledge and technology, 80 per cent of blindness and vision impairment is preventable or treatable, and the goal of eliminating avoidable blindness as a major public health problem is well within our grasp.

80 per cent of blindness and vision impairment is preventable or treatable

---


\(^4\) Frick K and Foster A, ‘The magnitude and cost of global blindness’, *American Journal of Ophthalmology* 135 (2003), 471-476. These figures may be further updated in 2010 when the WHO’s State of the World’s Sight publication is released.

In 2007 Vision 2020 Australia, in partnership with member agencies, developed a 10 year plan to eliminate avoidable blindness and vision impairment in the Asia Pacific. This plan was based on a $600 million costing model, drawing upon the global VISION 2020: The Right to Sight approach which has been shown in many different contexts to be successful. This approach has reduced avoidable blindness by controlling major blinding conditions, by providing eye examinations, developing infrastructure, building the capacity of eye care professionals and raising awareness about the importance of eye health and the availability of services.

Recognising the crucial importance of this work and the huge role Australia could play, the Australian Labor Party and the Coalition each made funding commitments, and in 2008 the new Labor Government provided an initial outlay of $45 million towards the Avoidable Blindness Initiative, funding Phase 1 of the Regional Plan.

Following the development of a Partnership Framework with AusAID, the Vision 2020 Australia Global Consortium was officially launched by Parliamentary Secretary for International Development Assistance, the Honourable Bob McMullan in November 2009 at Parliament House. At the launch, Mr McMullan noted that ‘the members of this Consortium have transformed the lives of tens of thousands of people’, and asserted that the Global Consortium’s efforts to eliminate avoidable blindness are a ‘key element in the long-term strategy to combat global poverty, to give people, born wherever they might be, the chance to achieve their dreams and aspirations.’

In December, the Global Consortium’s Regional Plan Steering Committee finalised a workplan of 13 programs. Following AusAID’s approval of the workplan, the first funds for these programs were disbursed in January 2010, and work has commenced in Papua New Guinea, the Solomon Islands, Fiji, Samoa, Timor-Leste, Cambodia and Vietnam.

The Vision 2020 Australia Global Consortium brings together a group of Australian organisations with significant diversity of philosophy, size, representation, mandate, working methods and capacity. Through the development of common quality standards and approaches to eye health and the implementation of the VISION 2020 building blocks, the Global Consortium is making a significant contribution to the elimination of avoidable blindness and vision impairment in the Asia Pacific region.
At present, the Global Consortium consists of Vision 2020 Australia and nine member agencies:

- CBM Australia
- Centre for Eye Research Australia
- Foresight Australia
- International Centre for Eyecare Education
- Royal Australasian College of Surgeons
- Royal Australian and New Zealand College of Ophthalmologists
- Royal Institute for Deaf and Blind Children
- The Fred Hollows Foundation
- Vision Australia

Programs are being implemented in-country through partnership with a range of stakeholders including NGOs and governments, and ongoing establishment of partnerships remains a central priority.

The Consortium’s future programming will be informed by evaluations of current programs, AusAID-funded needs assessments and other reviews, with lessons learned and recommendations drawn upon to help ensure ongoing relevance, effectiveness, efficiency and sustainability.

Ongoing funding will continue to enable project implementation in those countries where Avoidable Blindness Initiative programs are currently being implemented, and the Global Consortium will also expand its focus in accordance with regional eye health needs and Australia’s national interests to include Indonesia, the Philippines, Mongolia, and enhanced coverage in the Pacific.
Eye health and vision care needs in the Asia Pacific

While the diversity of economic and demographic characteristics of the countries in the Asia Pacific results in a wide range of eye health challenges, several broad themes can be drawn out. The Global Consortium is addressing each of these themes in its efforts to eliminate avoidable blindness.

Inadequate human resource development and infrastructure

Human resource development remains a central challenge to health sectors in the Asia Pacific. Despite improvements in recent years in some countries, there is still a crucial shortage of medical personnel and eye doctors, particularly in rural areas. Shortages in mid-level eye care personnel and frontline primary healthcare workers have been identified as having the greatest impact. There is a shortage of appropriate training opportunities, and some countries face the added challenge of healthcare personnel retirement and migration.

Lack of quality information and information systems

Good planning, whether at the global, regional, national or district level, requires accurate information. This accuracy is particularly important given that VISION 2020 planning is focused on the needs of a specific population and not just a hospital. Collecting meaningful data and undertaking regular reporting is time-intensive, and requires systems that are understood and used by workers consistently.

Affordability

Surveys have demonstrated that one of the biggest barriers to improved eye health is cost — whether for consultation with an eye doctor, for surgery or for provision of spectacles. The Rapid Assessment for Avoidable Blindness (RAAB) carried out in Vietnam in 2008 found that ‘cannot afford’ was the major barrier to surgery in people bilaterally blind due to cataract in eight out of 16 provinces.6 A 2007 RAAB carried out in Cambodia found that, for 29 per cent of citizens, ‘cannot afford’ is the most common barrier to cataract surgery.7 In Laos this figure was found to be 32 per cent,8 while a survey in the Philippines demonstrated a similar financial barrier.9

Community awareness

A lack of community awareness about eye health and how to access treatment featured prominently in each of the RAAB surveys that have been carried out in the Asia Pacific. In Cambodia, over 35 per cent of people reported that they were unaware of treatment options or scared of having an operation. In Fiji, ‘fatalistic attitudes’ (acceptance of the condition or a belief that they could manage) accounted for over half of those who experienced vision impairment, while ‘fear’ accounted for another eight per cent.10 Promotion and community outreach are important elements of ensuring that citizens are aware of eye health and know where quality care can be accessed.

6 Limburg H, Results of Rapid Assessment for Avoidable Blindness in 16 Provinces of Vietnam, 2008.
7 National Program for Eye Health, Rapid Assessment for Avoidable Blindness in Cambodia, 2007.
8 National Program for Eye Health, Rapid Assessment of Avoidable Blindness in Laos, 2008.
The Global Consortium’s approach

Drawing upon the expertise and experiences of its members, the Global Consortium utilises a variety of approaches to eliminating avoidable blindness. Addressing local needs, and developing partnerships, are central to these efforts.

The VISION 2020 approach works to eliminate avoidable blindness by controlling major blinding conditions, developing infrastructure and building the capacity of eye care workers. VISION 2020, based on experiences in India, has adopted a tiered model that ensures effective integration of primary, secondary and tertiary eye care. This model has been and will continue to be tailored by the Global Consortium to ensure that local needs and contexts are addressed.

Several Consortium programs funded under the Avoidable Blindness Initiative have utilised this top-down approach. From Ministries of Health and National Referral Hospitals, to Vision Centres and community eye units, through to screening in schools, assistance to local health clinics and the provision of community education, the Global Consortium has adapted the VISION 2020 approach to the needs and contexts of different countries, provinces and communities. The VISION 2020 approach strongly reflects one of the key recommendations of the AusAID’s 2009 report Australian Aid to Health Service Delivery, which was to integrate a broad set of interventions including capacity building, adequate human and financial resources, and supportive institutions and systems.11

The development of Vision Centres will continue to be one element of the Global Consortium’s approach. A Vision Centre delivers primary eye care including screening, refraction, dispensing of spectacles, disease detection, appropriate referral, community activities such as Vitamin A campaigns and non-medical aspects of trachoma control. Vision Centres are accessible to the poorest of the poor, who might otherwise find it difficult to utilise eye health services. Vision Centres link horizontally with hospitals and other primary eye health programs, and can act as catalysts for establishing other community health care services.

Service centres (or eye units in district hospitals), which complement Vision Centres and are the basis of district-wide eye care for populations of up to 500,000, will also continue to be developed (see Appendix 2).

Future program development, and the Global Consortium’s engagement with AusAID, will be informed by the findings and recommendations of AusAID’s recently commissioned Independent Progress Review. During a meeting held in May 2010 between Global Consortium members and the review consultants, discussion focused on the importance of utilising appropriate aid modalities, ensuring that Global Consortium programs are aligned with the stated priorities of governments, and integrating the Avoidable Blindness Initiative into AusAID’s country health strategies.

It is envisaged that avoidable blindness activities will be integrated into AusAID’s country programs, as efforts to eliminate avoidable blindness should be seen as part of a holistic strategy to improve public health systems and indicators. Pacific Partnerships for Development offer one avenue for this to take place, while in Vietnam (for instance) closer links will be forged with the Vietnam Delivering Better Health Initiative. Accordingly, one key focus of the Global Consortium’s ongoing activities will be the strengthening of relationships with AusAID staff in-country.

The Global Consortium will continue to develop strong links with key stakeholders, including the World Health Organisation (WHO), governments, health ministries and other stakeholders. The Global Consortium will continue to strengthen advocacy collaboration with the International Agency for the Prevention of Blindness (IAPB), WHO and Australian Government to ensure that governments and stakeholders in the region increase their commitment to the prevention of avoidable blindness.

The Global Consortium will also work with the IAPB to monitor the readiness of governments and health systems in Avoidable Blindness Initiative countries, in order to gauge the current status of eye health systems and determine which interventions are most appropriate. It is also envisaged that, with more funding from the Australian Government, the IAPB will play a greater role in assisting governments across the region to improve their readiness levels.

Aid harmonisation and effectiveness, as enshrined in the Accra Agenda for Action and Paris Accord, is an integral element of the Global Consortium modus operandi and will continue to ensure greater efficiencies and elimination of program overlap.

The Fred Hollows Foundation New Zealand has been consulted in the development of this Towards 2020 proposal, and the Consortium will continue to engage in collaborative planning with all relevant stakeholders.
Vietnam Australia Vision Support Program

The Vietnam Australia Vision Support Program exemplifies the benefits of the Global Consortium’s collaborative approach, and carries forward the harmonisation and efficiency commitments of the Accra Agenda for Action and the Paris Declaration. The program is being implemented by four Global Consortium members — The Fred Hollows Foundation, CBM Australia, the International Centre for Eyecare Education and the Centre for Eye Research Australia. A particular strength of the program is that it is drawing upon the strengths and expertise of each agency.

This two-year pilot program will develop a disability-inclusive eye service model in eight districts of Vietnam. Lessons learned will inform new national eye care policies, and the model will potentially be replicated throughout Vietnam and beyond.

The Vietnam Australia Vision Support Program is currently nearing the completion of its initial planning phase. Detailed workplans are being developed for submission to the Government of Vietnam for program approval, which is expected by September 2010. These workplans have been developed through needs assessments, situational analyses, baseline data collection and consultation with local partners and beneficiaries.

In April 2010, a planning workshop was held in Hanoi to finalise the workplans. The workshop engaged a range of stakeholders including AusAID, Vietnam’s Ministry of Health, the Vietnam National Institute of Ophthalmology, Consortium members and representatives from each program location. The collaborative approach of the workshop strengthened partnerships, enhanced ownership of the program by local agencies and secured high level political support.
Country strategies to eliminate avoidable blindness by 2020

The Global Consortium has experience and expertise throughout the Asia Pacific, and is implementing tailored strategies to meet the individual needs of countries.

Avoidable Blindness Initiative programs are a key element of poverty reduction efforts, and should be a central part of Australia’s efforts to improve public health in the region.
The Pacific

Eye health in the Pacific is among the world’s worst, and Australia can play a major role in tackling this key issue.

As noted in the 2009 *Australian Aid to Health Service Delivery* Evaluation Report, 58 per cent of the Solomon Islands health workforce is concentrated in Honiara’s National Referral Hospital, and attracting staff to work in remote locations is a major problem, particularly in Papua New Guinea. Solomon Islands and Vanuatu are too small to sustain a medical school and rely on training provided in Papua New Guinea and Fiji.12

Depending on needs, scale-up and the establishment of new programs will take place in the Solomon Islands, Fiji and Samoa, and new programs will be developed in Kiribati, Tuvalu, Nauru, Tonga, the Federated States of Micronesia, Palau, the Marshall Islands and the Cook Islands. Papua New Guinea will be a primary focus, and a program will be implemented to address the issue of trachoma in the Pacific.

Proposed activities

- human resource development, with a focus on training of mid-level eye care personnel to build capacity. The University of Papua New Guinea and the Pacific Eye Institute in Fiji will be utilised for training of eye doctors and eye nurses
- provide further scholarships to personnel to reduce the reliance on visiting teams
- development of Vision Centres
- surgeries for cataract and other conditions
- diabetes screening
- outreach services and public education

The Global Consortium will work closely with governments, The Fred Hollows Foundation New Zealand and other stakeholders in the region. Activities will continue to be integrated within existing health systems.

Saving Sight in the Solomon Islands

65 year old Eileen sits in a corner of the crowded eye clinic at the National Referral Hospital in the Solomon Islands’ capital, Honiara, waiting for an ophthalmic nurse to test her progressively failing vision. On Sundays, this softly spoken woman teaches children how to sing. Unfortunately for Eileen and her students, her vision impairment is now making it difficult to read songs from her hymn book.

As afternoon heat fills the eye clinic, Eileen calmly answers the ophthalmic nurse’s questions, quietly excited at the prospect of improving her eye sight. When told her vision can be improved with a simple pair of glasses, a warm smile stretches across Eileen’s face; glasses enable her to inspire her students and are an essential element of having an active lifestyle.

In developing countries, elderly people with a vision impairment often suffer in isolation, are excluded from social services and are unable to contribute to their families and communities.

Eileen’s case demonstrates that when glasses and eye care are accessible and affordable, age-related conditions that cause blindness can be simply treated.

As part of the Avoidable Blindness Initiative, ICEE, in partnership with Foresight Australia and the National Referral Hospital, is opening an optical workshop in the Solomon Islands to help people like Eileen maintain a high quality of life.
Eye health indicators in Papua New Guinea remain among the worst in the world, and a concerted effort is needed to address this unnecessary, devastating problem. An estimated 50,000 people in Papua New Guinea are blind, with an additional 10,000 new cases each year. Approximately 180,000 people in Papua New Guinea have low vision that could be corrected with spectacles. Cataracts account for 70 per cent of blindness, followed by refractive error, corneal diseases and trauma, all of which are preventable or treatable conditions.

Human resources in the health sector are limited. There are approximately 10 fully trained eye surgeons in Papua New Guinea, all based in urban centres, whereas 80 per cent of Papua New Guinea's population is based in isolated rural communities. Limited human resource capacity for health planning and management, and unreliable and limited health workforce data and information management systems also need to be addressed.

Migration and retirement of current health workers is a major challenge. Existing equipment and infrastructure in service delivery areas needs to be upgraded, especially in remote and rural areas, and almost all rural health services are under-funded. In Papua New Guinea, health care coverage and utilisation is significantly lower than in most other Pacific countries.

Proposed activities

- existing Vision Centres in Port Moresby, Mount Hagen, Lae, Rabaul, Mendi and Bougainville will be maintained and upgraded as necessary, and further Vision Centres will be developed
- the National Spectacle Supply System will be upgraded, eventually covering the population of 6.6 million by 2020
- human resource development will occur through training and mentoring of staff, particularly mid-level eye care personnel
- surgery for cataract and other conditions
- outreach services and public education
- development of information systems

Parliamentary Secretary for International Development Assistance, the Honourable Bob McMullan, with local ophthalmologist and head of PNG Eye Care, Dr Jambi Garap, at the Port Moresby Vision Centre. Photo courtesy of ICEE.

Pacific Trachoma Initiative

Trachoma is the leading infectious cause of blindness worldwide. While blinding trachoma has been eliminated in many parts of the world, recent surveys have demonstrated that trachoma remains a problem in the Pacific and needs to be addressed.

A Rapid Assessment of Trachoma was carried out in Kiribati, Nauru, Vanuatu, the Solomon Islands and Fiji, and in all of the administrative divisions screened the level of active trachoma in children was greater than the 10 per cent threshold above which the World Health Organisation recommends mass distribution of antibiotics. The survey report notes that risk factors for trachoma including poverty, crowding, poor sanitation and poor facial hygiene are expected to increase in tandem with increases in population size. There is also evidence that trachoma is present in Tuvalu, Tonga, Papua New Guinea and elsewhere in the Pacific.

As efforts in other parts of the world have demonstrated, a combination of surgery, antibiotic treatment, improvements in sanitation and promotion of facial cleanliness can lead to major reductions in the level of trachoma. With what we have learned in preventing and treating trachoma so far, the condition can also be drastically reduced in the Pacific, with substantial social and economic benefits. This can be achieved by carrying out population-based surveys, by performing surgeries and antibiotic treatments, through ongoing development of human resources and infrastructure, and through environmental improvements and enhanced facial cleanliness. Global Consortium members will work within existing regional structures and with Ministries of Health and World Health Organisation offices.

Proposed activities

- comprehensive population based surveys to confirm the prevalence of trachoma. Reliable population-based prevalence data are essential for understanding the scale of the trachoma problem and for planning, monitoring and evaluating control programs
- promotion of facial cleanliness, especially among children
- surgeries for late-stage trachoma
- human resource development
- infrastructure development strategies
- outreach services and public education
- feedback from pharmaceutical companies is that comprehensive mapping of trachoma prevalence will enable them to donate the antibiotic Azithromycin, a long-acting drug used to control the infection. Azithromycin is a broad spectrum antibiotic, and its provision for the treatment of trachoma will also have a broader impact in treating a variety of other infections including respiratory and sexually transmitted infections.
Vietnam

Despite significant improvements over the past decade, blindness remains a major public health problem in Vietnam. The main causes of blindness and vision impairment are cataract, refractive error, trachoma, glaucoma and Vitamin A deficiency. In the 2007 Rapid Assessment of Avoidable Blindness, the prevalence of low vision due to all causes was estimated to be 13.6 per cent.\(^\text{15}\)

Compared with its Southeast Asian neighbours, Vietnam has a relatively well established health system. According to national statistics, more than 100,000 cataract surgeries are performed each year, compared to 100 operations in the country in 1993. Human resource capacity has grown, and distribution networks have expanded. The main challenge in Vietnam is uneven distribution of health services and access for poor populations. Primary eye care exists in only 317 out of 668 districts, and ophthalmologists operate in only 211 districts. Ten provinces have no provincial level eye services or social disease control centres.

Global Consortium agencies are currently finalising a work plan for the Vietnam Australia Vision Support Program, and implementation will commence in 2010. Thematic and geographic coverage is divided to build upon pre-existing projects, and ensure efficiency and the elimination of overlap. In line with the Vietnam National Prevention of Blindness Plan 2009–2012, Global Consortium members are focused on controlling cataract, establishing refractive error services, and developing human resources.

New programs will be developed inline with the National Plan and in response to surveys, needs assessments and lessons learned from VAVSP. The Global Consortium’s work in Vietnam and the aid modalities through which this takes place will also be shaped by AusAID’s involvement in Vietnam’s health sector, which may evolve with the cessation of the Delivering Better Health Initiative in 2011–2012.

Proposed activities

- further development of Vision Centres and District Eye Units
- provision of equipment to provincial, district and communal health centres to enable eye health service delivery and outreach
- enhancement of health management systems
- surgeries for cataract and other conditions
- assessment of eye health in those areas not previously assessed
- outreach services and public education
- training of mid-level eye care personnel
- developing links between ophthalmologist networks and primary eye care networks

---


Tackling cataract blindness in Vietnam

The Avoidable Blindness Initiative – through The Fred Hollows Foundation – is bringing sight to people in some of the poorest regions of Vietnam, with community eye care development programs now active across six provinces.

In the Bac Quang District of Ha Giang Province, around 800 people were recently screened for various eye conditions and a total of 86 patients received surgery.

One patient who received sight restoring cataract surgery at the eye camp was Ly Thi Ghy.

Life had been very difficult for Ghy. Her husband died when she was young, so she had to raise 10 children on her own.

The past three years, however, have been the toughest. Like hundreds of thousands of people in Vietnam, Ghy suffered from cataract blindness. In Australia, a condition like cataract can be treated quite easily, but in Ghy’s home district there were no services available to treat this blinding condition.

Each day, Ghy guided her way down to the tea plantation to work. One of her daughters, Tran Thi Thanh, said ‘I am sad to see mum stumbling and bumping into walls, but she has a strong will and we can’t stop her from working.’

More than anything else, Ghy wanted her sight restored so that she could see the faces of her grandchildren, many of whom she had heard but never seen.

Luckily for Ghy, Vision 2020 Australia Global Consortium partner, The Fred Hollows Foundation, supported a surgical eye clinic in Bac Quang. She heard about the campaign through the promotion activities of The Foundation, who ensure that village health volunteers reach houses to let people know about the free cataract surgery.

When Ghy’s eye patch was removed just 24 hours after receiving cataract surgery, her life was instantly transformed. Her face lit up when she saw her house in the distance, where her children and grandchildren were waiting anxiously for her to return.

Over the next two years, the Australian Avoidable Blindness Initiative will support thousands of cataract surgeries and other activities in Vietnam so that more people like Ghy can see again.
Cambodia and Laos

Although health indicators in Cambodia and Laos have improved over the past decade, public health remains among the worst in Asia. Delivery of basic services in rural areas is difficult because of a lack of infrastructure and human resource capacity, and expensive because of low population density. Eye health sectors in Cambodia and Laos face many of the same challenges experienced by their broader health systems.

Eye health human resources remain insufficient to meet demand. In Cambodia, there are currently eight trained local ophthalmologists, 44 basic eye doctors, 89 ophthalmic nurses and 29 refractionists. The VISION 2020 target is for 55 ophthalmologists. In Laos, there are currently nine ophthalmologists (and six medical graduates in an ophthalmology residency program), 14 basic eye doctors, 131 ophthalmic nurses and 13 refractionists. The Laos VISION 2020 target is to have at least 22 ophthalmologists by 2020.

While most specialist ophthalmologists in Laos and Cambodia are located in urban areas, around two thirds of cataract surgeons and ophthalmic nurses are located in rural areas, mostly at district hospitals where facilities are limited. Recruiting and retaining personnel in rural areas remains a significant challenge in both countries, and eye health infrastructure, particularly in rural areas, also remains a key concern.

Proposed activities

The Global Consortium’s future activities will be consistent with Cambodia’s National Strategic Plan for the Prevention of Blindness 2008–2015\(^\text{16}\) and national priorities in Laos.

- human resource development, particularly training of mid-level eye care personnel
- integrating primary eye care into the district health system, and enhancing links with training centres in Vietnam and Thailand
- infrastructure development
- ensuring quality and availability of ophthalmic supplies
- disease control to address cataract, trachoma, Vitamin A deficiency, corneal scarring and glaucoma
- development of information and management systems
- public education and outreach services

---

\(^{16}\) Cambodian Ministry of Health, National Strategic Plan for Prevention of Blindness 2008-2015.
After a lifetime of blindness, two children can now see

Siblings Sony (9) and Somita (6) live in a small village in the Kandal Province of Cambodia. Before eye health nurses visited their village, Sony and Somita were legally blind.

The children’s parents said ‘We noticed something was wrong with our son’s and daughter’s eyes within a few months of their birth. They weren’t like our other children.’

Sony and Somita’s father took the children to a screening program in a neighbouring village, delivered by the International Centre for Eyecare Education. Within a few hours, the children’s eye condition was identified and both children were given glasses to correct their vision.

With a simple pair of spectacles, which most Australians take for granted, the children’s lives have been transformed.

Sony says, ‘Before I had glasses, it was blurry, I couldn’t see clearly.’

With their new glasses both children can read the blackboard at school, enabling them to get an education.

‘When I put my glasses on for the first time, I was very happy,’ Sony says with a smile. ‘Now I can see letters and read and write. Before, I was not doing well at school, but now I am.’
Timor-Leste

Approximately 13,500 out of Timor-Leste’s population of 1,062,000 are blind, and a further 40,000 have low vision. Cataract, uncorrected refractive error, Vitamin A deficiency and trauma are primary causes of vision impairment in Timor-Leste.

The Global Consortium’s work will involve close collaboration with other NGOs. Important links have been established and will be further developed with training institutions in Malaysia and Indonesia. The Global Consortium’s programs will be developed inline with the National Eye Health Strategy and will build upon the achievements of the East Timor Eye Program, which was established in response to a request by the World Health Organisation to re-establish eye health services in Timor-Leste soon after its independence.

Proposed activities

• clearing the backlog of avoidable blindness, particularly through cataract surgery
• expanding service delivery to the districts and sub-districts to ensure that the most remote communities are able to access quality eye care services
• fully equipping referral hospitals with up to date ophthalmic equipment, preceded by a comprehensive needs assessment
• establishing an effective outreach program in-country to gradually reduce dependence on visiting teams from Australia
• a phased approach to establish basic eye care and sub-specialty clinics
• strengthening human resource capacity by training additional ophthalmologists, mid level eye care personnel, and ophthalmic nurses
• developing the skills of existing rehabilitation trainers and identifying and training new rehabilitation workers to increase local capacity
• setting up tele-ophthalmology services as a clinical and educational resource for the local ophthalmology team

Men following sight-restoring cataract surgery in Timor-Leste. Photo courtesy of RACS.
Cataract and uncorrected refractive error accounted for 74.2 per cent and 62.5 per cent of bilateral low vision and bilateral blindness in the 2003 study, and 70.7 per cent and 62.65 per cent in the 2007 study. Refractive error was the second highest cause of vision impairment and blindness in both studies, while Vitamin A deficiency was identified as a major cause of childhood blindness. Both studies also found a correlation between low income and vision impairment.

Reflecting the importance of Indonesia’s development to Australia’s national interests, and the breadth of its development challenges, Indonesia is one of the largest recipients of Australia’s aid. The Global Consortium is ideally placed to contribute to the elimination of avoidable blindness in Indonesia, thereby contributing to Indonesia’s development and Australia’s national interests. The Global Consortium will build upon those activities already being undertaken by its members, and expand eye care services and disease control across the country.

Indonesia has the second highest prevalence of blindness and vision impairment of any country in the world...
The Philippines

The 2002 Philippine National Survey on Blindness provides comprehensive analysis of the prevalence and causes of vision impairment in the Philippines. The survey found that, while the prevalence of blindness and vision impairment had fallen over the previous 15 years to a national average of 2.56 per cent, major disparities still existed between regions.

For instance, prevalence of vision impairment and blindness in Central Luzon, Central Mindanao, National Capital Region, Cordillera Autonomous Region and Caraga ranged from 0.76 to 2 per cent. In the Autonomous Region of Mindanao prevalence of blindness and vision impairment was 3.23 per cent, while in Cagayan Valley the prevalence was 4.94 per cent. A rapid assessment carried out in 2007 confirmed the relative high magnitude of vision impairment and blindness in some rural communities, with prevalence of 2.6 per cent in Negros Island and 3 per cent in Antique District.

The vast majority of vision impairment and blindness in the Philippines is caused by refractive error and cataracts. From 1995-2002, the overall prevalence of vision impairment caused by cataract fell from 2.97 per cent to 1.83 per cent, while the prevalence of vision impairment caused by refractive error rose from 1.09 per cent to 2.06 per cent. Glaucoma, retinopathy and maculopathy are minor causes of vision impairment and are found in less than 0.02 per cent of the total population.

Proposed activities

- strengthening cataract services
- human resource development, particularly mid-level eye care personnel
- addressing diabetes and diabetic retinopathy
- improving information systems
- developing refractive services

A 1992 survey found that cataract accounted for 36 per cent of blindness, glaucoma accounted for 35 per cent of blindness, uncorrected refractive error accounted for 15 per cent of blindness, and that Climatic Droplet Keratopathy accounted for seven per cent of all blindness. The Global Consortium will undertake surveys to provide up-to-date information on the prevalence and causes of blindness and vision impairment.

Mongolia’s National Strategic Plan 2005–2010 estimates that the prevalence of blindness is 0.5 per cent, although as access to eye care is often limited to provincial capital cities this figure is higher in rural areas.

Proposed activities

The Global Consortium’s activities in Mongolia will focus on priorities determined in the National Strategic Plan 2005–2010.

• human resource development, particularly the training of ophthalmologists and mid-level eye care personnel
• integration of primary eye care into primary healthcare
• development of referral systems
• development of more effective systems of stock management, with a focus on quality stock and ensuring affordability of glasses
• development of systems to ensure sustainability of income generation from glasses and lens sales
• improving management and information systems to bring the eye care sector up to parity with the broader health sector

Global Consortium members are monitoring progress against the current Strategic Plan to clarify priorities for the period following 2010.
Cross program approaches

The Global Consortium’s programs are underpinned by the highest standards of program management and accountability. They directly benefit the most marginalised members of communities, and improve the lives of the poorest of the poor. They empower women and enable children to receive an education.

Disability and gender

The Global Consortium adopts a multi-faceted approach to disability and gender inclusion in its program implementation. Reducing the prevalence of vision impairment, by its very nature, leads to reductions in levels of disability. Global Consortium members have developed guidelines for disability and gender inclusion that are applied at all levels of the program cycle to ensure that the needs of women, girls and people with disabilities are recognised and addressed. This guidance focuses on in-country capacity building, health service strengthening, working with provincial governments and Prevention of Blindness groups, revision of training curricula, and project monitoring and evaluation.

A number of Global Consortium projects in Cambodia and Vietnam focus specifically on disability and gender. CBM Australia is piloting the Gender and Disability Inclusive Approach to Eye Health Program. This program includes needs assessments, mainstreaming of gender and disability inclusive practices into all stages of the project cycle, staff capacity building and the development of effective referral and outreach systems. The Global Consortium also focuses on the provision of low vision services and rehabilitation, reducing the levels of disability experienced by those with untreatable vision impairment.

In partnership with AusAID, the Global Consortium will continue to refine its disability and gender approaches, and broaden the geographic scope of this work.

Blindness discriminates against women and girls, and eliminating avoidable blindness has an important role to play in achieving Millennium Development Goal 3
Eye health and community development

While eye health interventions are cost effective and have been shown to have a tremendous positive impact on livelihoods and community development, the Global Consortium will also seek to enhance direct links between eye health and community development. This approach will include:

- skills development for the vision impaired and those who have had their sight restored
- training of spectacle technicians and the equipping of these individuals to own their own small labs
- integration of the eye care sector into the broader health sector

Regional coordination

Strengthening the coordination of the eye health activities of both governmental and non-governmental stakeholders, and enhancing advocacy efforts to a range of stakeholders, is of central importance in eliminating avoidable blindness in the Asia Pacific. This will be achieved by continuing the currently funded Strengthening Western Pacific Regional Coordination program, which enhances the capacity of the IAPB.

Existing advocacy and program coordination networks in the Western Pacific Region will be improved. The ability of the regional Chair and sub-regional Co-Chairs to coordinate advocacy and stakeholders will be enhanced.

An IAPB Regional Program Manager has been funded through the Global Consortium and is now based at Vision 2020 Australia. Further funding will enable this position to continue beyond 2012. This Program Manager is increasing the number of sustainable national and regional avoidable blindness programs in the Western Pacific Region, and delivering a program of capacity building workshops for governmental and non-governmental stakeholders.

Communications and information sharing will also be improved through development of an interactive Western Pacific website.
Summary

With the commencement of the Avoidable Blindness Initiative, Australia has established itself as a leader in efforts to eliminate avoidable blindness.

Ongoing funding is needed for millions of surgeries and interventions to treat cataract and other blinding conditions, and to train personnel at all levels of the health system to ensure that eye health staff have the skills to eliminate avoidable blindness in a sustainable manner. Geography should not determine a person’s right to sight, and accordingly it is essential that eye health services are accessible in the most remote parts of the Asia Pacific. Underpinning all of these efforts is the need to work with governments and other local stakeholders to ensure that blindness elimination is sustainable. Public education is also essential so that all people in Australia’s region understand the importance of eye health, the practical steps they can take to protect their sight, and the assistance available if they require it.

This work is vital, and the goal of eliminating avoidable blindness by 2020 is firmly within our grasp. We have the moral impetus, the practical tools and the knowledge to achieve this ambitious task, and the onus is now on the Australian Government and other stakeholders to ensure that avoidable blindness, and the poverty it causes, is eliminated.

One of the great advantages of eye health programs is their tangible, cost effective nature. At a time when the Australian public is eager to understand why Australia provides aid to other countries, and wants to know that this aid makes a difference, the Avoidable Blindness Initiative can continue to provide evidence that international development assistance is effective.

Restoring a person’s sight by removing a cataract or trachoma, building a new eye hospital, or providing spectacles to a vision impaired child are proven, cost effective ways of improving quality of life and reducing poverty, and should become an integral element of Australia’s aid program.

Australia also has a key role to play in advocating to ensure that other governments and stakeholders understand the need for efforts to eliminate avoidable blindness, and are prepared to follow the lead of the Australian Government.
It is strongly recommended that the Australian Government continue and expand funding for the Avoidable Blindness Initiative as we move towards 2020 and our goal of eliminating avoidable blindness and reducing the impact of vision loss in our region.

A financial commitment of $475 million from 2012–2020 would:

- fund Cambodia’s National Eye Care Program between 2012–2016. As Appendix 3 shows, for approximately $14 million, the Australian Government could ensure the sustainable elimination of avoidable blindness in Cambodia through training of eye care personnel; surgeries and provision of drugs to eliminate cataract and other blinding conditions; the provision of spectacles to the tens of thousands of Cambodians who experience refractive error; and the establishment of eye health infrastructure across the country.

- eliminate blinding trachoma in the Pacific.

- establish comprehensive eye care systems in Indonesia, including in the five poorest provinces. This would dramatically reduce poverty in Indonesia, improve Indonesia’s broader health care system, and serve as tangible evidence of Australia’s commitment to this crucial bilateral relationship.

- enable the cost effective, sustainable establishment of eye care systems in Papua New Guinea. The Avoidable Blindness Initiative could provide an example of Australia’s expertise during a period of change in the way Australia provides development assistance to its Pacific neighbours, and serve as a visibly effective element of AusAID’s strategy in Papua New Guinea.

- continue implementation and enhancement in Vietnam and beyond of the partnership model that has been developed through the Vietnam Australia Vision Support Program. This model, which is revolutionising the way agencies use expertise and minimise inefficiency, and will continue to be improved and opportunities will be explored for regional expansion.

Recommendation

An investment of **$475 million** from 2012–2020 will enable agencies to consolidate the revolutionary systems and processes that have been developed over the past two years; to build upon the programming that has been undertaken so far; and to develop a comprehensive new workplan in countries where avoidable blindness remains unacceptably prevalent.
Appendix 1

Global Consortium programs under the Avoidable Blindness Initiative

Cambodia

Strengthening gender and disability inclusive approaches to community eye health to reduce avoidable blindness

This program is reducing avoidable blindness and disability by strengthening provincial level services through improvements to Takeo Eye Hospital, while developing a district level Vision Centre and Optical Shop in Kiri Vong. By integrating a strategy for gender and disability inclusion, this program is enhancing access to eye care, rehabilitation and education by people with disabilities, women and girls.

Principal partner
CBM Australia

Supporting partners
Centre for Eye Research Australia, International Centre for Eyecare Education, Takeo Provincial Eye Hospital

Activities
• establish a Vision Centre which will provide primary eye care including screening for eye disease, refraction and dispensing of glasses, and provide patient referral services
• develop an Optical Workshop which will support the work of the Vision Centre by making spectacles and providing equipment and technical support
• train 274 Cambodian eye health staff
• conduct local awareness raising activities as part of World Sight Day
• increase the cataract surgical rate to 2,606 within five years to clear the cataract backlog

Principal partner
The Fred Hollows Foundation

Supporting partners
The Cambodian Ministry of Health

Activities
• national refractive error survey of 4,000 school children
• ophthalmology residency training for nine graduates
• train eight graduates in refractive nurse training
• train 20 nurses as trainers of child vision care
• train 200 school teachers in child vision care
• train 545 community health workers
• construct a tertiary-level National Institute of Ophthalmology, and a primary eye care unit and secondary eye care hospital
• conduct 6,800 cataract surgeries and provide 5,000 spectacles
• deliver 218 community outreach eye care screening sessions

Refractive error service development and capacity building in Cambodia

As part of ICEE’s strategy to improve access to refractive error services in the region, it is collaborating with other organisations to scale up eye care activities by establishing Vision Centres. By developing strategic partnerships, building on existing eye care services and training vision screeners, this program is increasing the scope of services offered to the community. Establishment of low vision services at Vision Centres is increasing access of disadvantaged groups, including the poor, people with disabilities, marginalised groups, women and girls, ethnic minorities, and those living in remote areas. Locating these services in the provinces will enable increased access by people with a vision impairment. Training of vision screeners to identify and refer patients who may need low vision services will also increase the reach of the service.

Principal partner
International Centre for Eyecare Education

The Fred Hollows Foundation

Australia-Cambodia Avoidable Blindness and Visual Impairment Project

This project will scale up existing efforts to address identified needs for eye care sector development in accordance with the aims of the Avoidable Blindness Initiative and priorities of the National Prevention of Blindness Plan of Cambodia. Program focuses are broad, and include research, human resource development, disease management, infrastructure development and outreach.
Appendix 1 — Global Consortium programs under the Avoidable Blindness Initiative

Supporting partners
National Program for Eye Health, International Resource for the Improvement of Sight, Seva Foundation, Battambang Ophthalmic Care Centre, Cambodian Development Mission for Disability, Association for the Blind in Cambodia

Activities
• refurbish two eye clinics and establish Optical Workshops in existing primary health facilities
• conduct vision screening and dispense spectacles
• conduct outreach screening visits
• host an annual meeting of refraction nurses from five provinces to share information and experiences

Timor-Leste
Expanding eye care services, capability and rehabilitation into rural Timor Leste

Existing eye health services are unevenly distributed and insufficient to meet demand. Ophthalmologists are based in Dili, and with 80 per cent of the population living in rural areas, access to quality eye care services by more remote communities is a significant challenge.

This program accords with the Ministry of Health National Eye Health Strategy. It focuses on overcoming current limitations and improving the quality of eye health services in Timor Leste, and is aimed at equipping the referral hospitals, enabling the resident ophthalmology team to carry out outreach activities in the districts, and strengthening local capacity.

Principal partner
The Royal Australasian College of Surgeons

Supporting partners
Timor-Leste Ministry of Health, ProVision Eye Care, Fo Naroman Timor-Leste, Fuan Nabilan, Blind School, Vision Australia

Activities
• identify and train a second Timorese ophthalmologist
• train ophthalmic nurses
• identify opportunities to provide ophthalmology services to referral hospitals

Fiji
Capacity Building in Early Childhood Care and Education for young children with vision impairment

The project involves the scale up of existing activities provided by the Fiji government, NGOs and other stakeholders, with a focus on improving the quality of life of vision impaired children.

The project is increasing rehabilitation and preschool enrolments of children with vision impairments through the establishment of professional partnerships in the delivery of training programs for Ministry of Health, Ministry of Education and Fiji Society for the Blind personnel working in Fiji.

Principal partner
Royal Institute for Deaf and Blind Children

Supporting partners

Activities
• increase enrolments of girls and boys aged 0-6 years with vision impairment into rehabilitation and education programs
• provide training in Sydney and Fiji to two Fiji Ministry of Health and Ministry of Education staff, to enable them to establish an early childhood care and education program

Papua New Guinea
Strengthening eye care services in Papua New Guinea

This project is strengthening government capacity to provide effective eye care. It is expanding ICEE’s existing work at Port Moresby General Hospital and Mount Hagen General Hospital, Rabaul, Bougainville and Mendi.

Collection of service level data from the facility, National Spectacle Supply Scheme and outreach activities, and qualitative data from interviews of individuals accessing the service and training reports, will provide information for the future development of eye care services to help eliminate avoidable blindness due to uncorrected refractive errors.
Appendix 1 — Global Consortium programs under the Avoidable Blindness Initiative

Principal partner
International Centre for Eyecare Education

Supporting partners
Royal Australasian College of Surgeons, PNG Eye Care, Provincial Hospitals

Activities
• establish three Vision Centres
• deliver outreach services to remote areas

Samoa

Continuing development of eye health services and capacity in Samoa
The project aims to continue the development and implementation of a school vision screening program for Samoan children aged five to 12 years including developing Vision Centres, school screenings, training teachers and education.

Principal partner
Royal Institute for Deaf and Blind Children

Supporting partners
International Centre for Eyecare Education, Ministry of Education, Senese School

Activities
• develop and implement a school vision screening program for children aged 5-12 years
• provide training to three Spectacle Technicians
• establish one Vision Centre and an Optical Workshop at the Savai’i General Hospital

Solomon Islands

Upgrade of national Vision Centres in the Solomon Islands
This National Referral Hospital upgrade includes new equipment such as a teaching microscope, steriliser and instruments. These upgrades are providing vision centres with permanent surgical facilities. Project focuses will include nurse training and refractive error services.

Principal partner
Foresight Australia

Supporting partners
Royal Australasian College of Surgeons, Royal Institute for Deaf and Blind Children, Centre for Eye Research Australia, The Royal Australian and New Zealand College of Ophthalmologists and The International Centre for Eyecare Education

Activities
• provide refractive error services
• build local surgical capacity
• implement a community vision screening program for children aged 0–12 years to identify those who require glasses, low vision aids or referrals to other services
• upgrade or build four eye clinics
• training of nurses and trainers

Vietnam

Vietnam Australian Vision Support Program
The Vietnam Australia Vision Support Program aims to control the main causes of avoidable blindness in Vietnam and consists of three key components:
• build capacity of sub-national (province/district/ commune) health systems to plan, manage and support provision of comprehensive eye care
• build capacity of district level to deliver appropriate comprehensive eye care services
• contribute to national policy by documenting and reporting lessons learnt and operational research into key issues.

Principal partner
The Fred Hollows Foundation

Supporting partners
CBM Australia, Centre for Eye Research Australia, International Centre for Eyecare Education and Ministry of Health Vietnam

Activities
The workplan is still under development with the Vietnam government and is due for completion in August 2010. Following the approval of the workplan, implementation will take place at central, provincial and district levels.
Strengthening gender and disability inclusive approaches to community eye health to reduce avoidable blindness – Nghe An and Son La Provinces

This program aims to further strengthen provincial, district and commune level eye care services and linkages between each level, and to ensure gender and disability inclusion at all levels of the eye care program.

Principal partner
CBM Australia

Supporting partners
Provincial Ministry of Health, Centre for Eye Research Australia, International Centre for Eyecare Education

Activities
• focus on gender and disability inclusion to reduce avoidable blindness
• strengthen four district eye units
• provide eye health training to doctors, ophthalmic nurses, refraction nurses and spectacle technicians
• provide outreach activities to remote areas

Vietnam eye care capacity development

Through a comprehensive approach to improving eye health services at the provincial and district level, this project will result in a substantial improvement to the service capacity of primary and secondary level eye care providers in six provinces (Ha Giang, Thai Binh, Quang Binh, Hai Duong, TT Hue and Tien Giang).

People with blindness and vision impairment, particularly the poor, are benefiting from strengthened services, clinical interventions and improved quality of life. Additionally, the project will address issues of inequitable access in remote and underserved areas of Northern, Southern and Central Vietnam.

Principal partner
The Fred Hollows Foundation

Supporting partners
Provincial Departments of Health
Regional training resource

This project will provide information and identify resources and priorities for training needs in the region. Courses will be developed and implemented in gender, child protection, poverty and inclusion of minority groups.

Principal partner
Centre for Eye Research Australia

Supporting partners

Activities
- analysis of the education, training and resources available in the region, particularly in poorer areas
- development of capacity in education and training

Strengthening Western Pacific regional coordination

While the IAPB Western Pacific Region has been a world leader in efforts to eliminate avoidable blindness, its capacity has been limited by resource constraints, particularly in the availability of personnel to cover the ground. For many years, IAPB regional structure depended on IAPB Regional Chairs and Co-Chairs acting in an unpaid voluntary capacity to coordinate blindness prevention activity in the Region at all levels. This was often difficult or impossible.

In 2002 the Western Pacific Region obtained funds to employ a paid IAPB Regional Coordinator who covered the region’s need for active advocacy and National Planning Coordination. The current development need was identified by the Regional Chair, recognising the lack of resources and time for current IAPB Regional and Sub-Regional Co-Chairs to facilitate planning and organization between countries. The funding of a Regional Program Manager to coordinate these activities will result in a successful up-scale of existing activities to achieve specific objectives.

Principal partner
CBM Australia

Supporting partners
International Agency for the Prevention of Blindness, Vision 2020 Australia Global Consortium members

Activities
- strengthen the capacity of IAPB Sub-Regional Co-Chairs to strengthen and expand advocacy and coordination in the region
- deliver VISION 2020 workshops for regional governments, international non-government organisations and other organisations addressing avoidable blindness
A Vision Centre, staffed by appropriately trained mid level personnel, can treat uncorrected refractive error and meet 70 per cent of overall eye care needs of the community. This is a highly cost-effective and sustainable capacity building strategy for countries with limited resources.

Below is the budget of a Vision Centre recently established in the Pacific. Because of greater transport and accommodation costs in the Pacific, and the lower level of human resource development, costs are generally higher than in Southeast Asia.

### Indicative Vision Centre budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($AU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project cycle management</td>
<td>$24,707</td>
</tr>
<tr>
<td>Initial site visit with advocacy</td>
<td></td>
</tr>
<tr>
<td>Initial set up</td>
<td></td>
</tr>
<tr>
<td>Monitoring and evaluation (internal)</td>
<td></td>
</tr>
<tr>
<td>set up (equipment and ongoing costs)</td>
<td>$60,064</td>
</tr>
<tr>
<td>Optical Workshop equipment</td>
<td></td>
</tr>
<tr>
<td>Refraction equipment</td>
<td></td>
</tr>
<tr>
<td>Stock and freight</td>
<td></td>
</tr>
<tr>
<td>General (office equipment, refurbishments)</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>$52,928</td>
</tr>
<tr>
<td>ICEE Spectacle Technician Training Course (12 days)</td>
<td></td>
</tr>
<tr>
<td>ICEE Spectacle Technician Assessment and Training (3 days)</td>
<td></td>
</tr>
<tr>
<td>ICEE Refractive Assessment and Training (3 days)</td>
<td></td>
</tr>
<tr>
<td>Vision Centre Management Systems and Processes Training</td>
<td></td>
</tr>
<tr>
<td>(5 days)</td>
<td></td>
</tr>
<tr>
<td>Running costs</td>
<td>$41,020</td>
</tr>
<tr>
<td>Personnel salaries</td>
<td></td>
</tr>
<tr>
<td>Evaluation (external)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>$10,147</td>
</tr>
<tr>
<td>Promotional activities</td>
<td></td>
</tr>
<tr>
<td>Evaluation (external)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$188,866</td>
</tr>
</tbody>
</table>
Appendix 2b

Indicative District Eye Care Program budget

District level eye care is a vital element in the successful provision of comprehensive eye care services. This table outlines the costs associated with the establishment of a district eye health service, which can provide services to a population of at least 500,000. With roughly $US80,000 in establishment costs to purchase equipment and consumables, a district eye program can enable services including outpatient consultations, surgery, teaching and supervision of personnel delivering eye care services, outreach clinics and surgery, and program management.21

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slit lamp</td>
<td>$5,887</td>
</tr>
<tr>
<td>Other essential equipment</td>
<td>$13,432</td>
</tr>
<tr>
<td>Minor procedures</td>
<td>$1,107</td>
</tr>
<tr>
<td>Ward</td>
<td>$7,870</td>
</tr>
<tr>
<td>Operating microscope</td>
<td>$6,700</td>
</tr>
<tr>
<td>Instrument sets</td>
<td>$1,500</td>
</tr>
<tr>
<td>Other instruments</td>
<td>$1,000</td>
</tr>
<tr>
<td>Education</td>
<td>$3,600</td>
</tr>
<tr>
<td>Administration</td>
<td>$5,500</td>
</tr>
<tr>
<td>Outreach clinic and surgery</td>
<td>$5,900</td>
</tr>
<tr>
<td>Transport</td>
<td>$19,000</td>
</tr>
<tr>
<td>Sutures/intraocular lenses and artificial eyes</td>
<td>$6,300</td>
</tr>
<tr>
<td>Drugs – basic stock</td>
<td>$1,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$79,296</strong></td>
</tr>
</tbody>
</table>

Appendix 3

Cambodian Eye Health Program
budget 2012–2016

**Project:** Eye Care Program in Cambodia  
**Implementing Partners:** National Program for Eye Health, NGOs  
**Activity Location:** Cambodia  
**Timeline:** 1 January 2012 – 30 December 2016  
**Budget:** $US12,017,577

<table>
<thead>
<tr>
<th>Objective</th>
<th>Main activities</th>
<th>Outcomes</th>
<th>Activity schedule</th>
<th>Budget ($US)</th>
<th>More information</th>
</tr>
</thead>
</table>
| **RESEARCH**  
To undertake research that will provide evidence of project impact and inform future eye care programs. | Glaucoma screening to be conducted in selected provinces | Reduced prevalence of glaucoma | 2013 | $50,000 | Five selected city and provinces |
| | Diabetic retinopathy screening to be conducted in selected provinces | Reduced prevalence of diabetic retinopathy | 2014 | $70,000 | Phnom Penh and four selected provinces |
| | Rapid Assessment of Cataract Outcomes | Cataract surgical outcomes | 2015 | $40,000 | Five selected provinces |
| **HUMAN RESOURCE DEVELOPMENT**  
To increase the number and improve the skills of eye care service providers at primary, secondary and tertiary level | Ophthalmology residency training (ORT) course delivered at local training institutions | ORT course delivered and an increase of 25 qualified ophthalmologists capable of delivering ophthalmic services in the public health system | 2012–2016 | $250,000 | Phnom Penh and four teaching hospitals |
<p>| | Sub specialisation in retina, glaucoma, childhood blindness, cornea and refractive | Five sub-specialties graduated from leading overseas institutions | 2012–2016 | $150,000 | Selected qualified training Institutions |
| | Upgrading sub-specialty skills | Short-Course to increase sub-specialty skills trained in overseas. (5 candidates certificated for the 5 years) | 2012–2016 | $50,000 | Selected qualified training institutes |
| | Five refraction training courses delivered at local training institutions | One year course for optometry developed. Graduated students from high school selected to be in the course (approximately six candidates selected per year) | 2012–2016 | $150,000 | |
| | Small Incision Cataract Surgery (SICS) course established | Twenty ophthalmologists trained in SICS in Siem Reap Regional Eye Hospital (three candidates per year) | 2012–2016 | $100,000 | Training to be at Siem Reap Regional Eye Hospital. |
| | Short course training in Introduction Course in Phaco Surgery in Cambodia | Fifteen Ophthalmologists trained in Phaco surgery | 2012–2016 | $52,500 | Training is to be in NIO and Teaching hospitals. |</p>
<table>
<thead>
<tr>
<th>Objective</th>
<th>Main activities</th>
<th>Outcomes</th>
<th>Activity schedule</th>
<th>Budget (US$)</th>
<th>More information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUMAN RESOURCE DEVELOPMENT</strong> To increase the number and improve the skills of eye care service providers at primary, secondary and tertiary level</td>
<td>Ophthalmic Nurse Training</td>
<td>Forty nurses trained</td>
<td>2012–2016</td>
<td>$280,000</td>
<td>Training in Takeo</td>
</tr>
<tr>
<td></td>
<td>Thirty nurses undertake training of trainer in primary eye care course, and 545 community health workers trained in PEC delivery</td>
<td>Thirty nurses capable of training community health workers in PEC. 545 community health workers capable of identifying common eye problems, treating basic problems at community level and referring complex cases to the appropriate level of the health system for treatment</td>
<td>2012–2015</td>
<td>$60,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuing medical education through annual national workshops, regional ophthalmology conferences, professional on-site mentoring and the maintenance of a national information resource centre</td>
<td>Enhanced skills, knowledge and professional networks of all eye health personnel in Cambodia</td>
<td>2012–2016</td>
<td>$150,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upgrading National Institute of Ophthalmology</td>
<td>New building constructed for curative, preventive and research departments</td>
<td>2013</td>
<td>$1,000,000</td>
<td>Construction 14m x 40m with 5 storeys in Phnom Penh.</td>
</tr>
<tr>
<td></td>
<td>Establish a new Regional Eye Hospital</td>
<td>New building constructed for training, research and ophthalmic services</td>
<td>2015</td>
<td>$600,000</td>
<td>Kampong Cham provinces</td>
</tr>
<tr>
<td></td>
<td>Establish two new eye units</td>
<td>One eye unit established in the town of Prey Veng province and one established in Sihanouk Ville</td>
<td>2012 and 2013</td>
<td>$600,000</td>
<td>Sihanouk Ville and Prey Veng</td>
</tr>
<tr>
<td></td>
<td>Establish two new refraction services and examination services in the northern Cambodia</td>
<td>Two new refraction services established in northern Cambodia</td>
<td>2012 and 2013</td>
<td>$90,000</td>
<td>Rooms refurbished and refraction equipment installed</td>
</tr>
<tr>
<td></td>
<td>Equipment and instruments for the diagnosis and treatment of blindness provided to participating project eye care facilities</td>
<td>Improved quality of eye care services through provision of necessary ophthalmic equipment and instruments in existing provinces</td>
<td>2012–2016</td>
<td>$400,000</td>
<td>All provinces in Cambodia</td>
</tr>
<tr>
<td></td>
<td>Four Phaco machine</td>
<td></td>
<td>2012–2016</td>
<td>$280,000</td>
<td>Siem Reap Regional Eye Hospital and Kampong Cham</td>
</tr>
<tr>
<td></td>
<td>Two Argon lasers</td>
<td></td>
<td>2012–2016</td>
<td>$150,000</td>
<td>NIO, two Regional</td>
</tr>
</tbody>
</table>
### Appendix 3 — Cambodian Eye Health Program budget 2012–2016

<table>
<thead>
<tr>
<th>Objective</th>
<th>Main activities</th>
<th>Outcomes</th>
<th>Activity schedule</th>
<th>Budget ($US)</th>
<th>More information</th>
</tr>
</thead>
</table>
| **HUMAN RESOURCE DEVELOPMENT**  
To increase the number and improve the skills of eye care service providers at primary, secondary and tertiary level | Equipment and instruments for the diagnosis and treatment of blindness provided to participating project eye care facilities | Five teaching microscope | 2012–2016 | $500,000 | NIO and 2 Regional |
| | | Five teaching slit lamp | 2012–2016 | $100,000 | NIO and 2 Regional |
| | | One refractive laser surgery machine | 2015 | $300,000 | NIO |
| | | Two Ocular Coherence Tomographers | 2012–2016 | $200,000 | 1 NIO and 1 regional |
| | | Two Humphrey visual fields analysers | 2012–2016 | $200,000 | 1 NIO and 1 regional |
| | | Three Fundus Cameras | 2012–2016 | $210,000 | 1 NIO and 2 regional |
| | | Two A/B Scan | 2012–2016 | $600,000 | 1 NIO and 2 Regional |
| | | 3 Specula Microscope | 2012–2016 | $900,000 | 1 NIO and 2 regional |
| **DISEASE CONTROL**  
To improve access to high quality and affordable eye health services. | Cataract surgeries | At least 100,000 cataract surgeries subsidised for the poor, enabling improved quality of life | 2012–2015 | $2,800,000 | Eye units and eye camps |
<p>| | Provision of spectacles | Up to 10,000 pairs of spectacles provided to eye units and outreach eye camps | 2012–2016 | $100,000 |
| | Childhood Blindness Project | 30,000 children screened, and improved or restored vision for up to 1,500 children | 2012–2016 | $90,000 |
| | Other interventions | At least 75,000 other sight restoring interventions subsidised for the poor | 2012–2016 | $750,000 |
| | Outreach eye care services conducted | At least 1,920 people received access to an eye examination at community-level | 2012–2016 | $230,400 | All provinces in Cambodia |
| | Eye health information, education and communication material developed and disseminated to communities | Increased awareness of eye disease and available eye care services | 2012–2016 | $194,115 |
| | National Health Management Information System installed at the Phnom Penh and provincial eye units | Improved health care quality through collection and reporting of patient data in accordance with national health policy | 2012–2016 | $24,470 |</p>
<table>
<thead>
<tr>
<th>Objective</th>
<th>Main activities</th>
<th>Outcomes</th>
<th>Activity schedule</th>
<th>Budget ($US)</th>
<th>More information</th>
</tr>
</thead>
<tbody>
<tr>
<td>NATIONAL PBL CAPACITY DEVELOPMENT</td>
<td>Regular National Prevention of Blindness Committee meetings held and a National PBL Strategic Plan reviewed in consultation with stakeholders</td>
<td>Strengthened National PBL Committee functions of planning, coordinating and reviewing the eye health sector of Cambodia</td>
<td>2012–2016</td>
<td>$27,647</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three National PBL Committee members attend a study tour in a selected country</td>
<td>Strengthened partnerships and knowledge of ophthalmology institutes to inform the development plans for a NIO</td>
<td>2012–2016</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three National PBL Committee members attend ophthalmology conferences overseas</td>
<td>Gaining technical and managerial skills to develop eye care</td>
<td>2012–2016</td>
<td>$110,880</td>
<td>Senior NPEH members attended in selected academic ophthalmology conferences.</td>
</tr>
<tr>
<td>PROJECT MANAGEMENT</td>
<td>Eye care needs assessment conducted of regional eye hospitals and eye care services</td>
<td>Needs identified for establish eye care services in Cambodia.</td>
<td>2012–2016</td>
<td>$25,500</td>
<td>Needs analysis and feasibility assessment completed and plan produced.</td>
</tr>
<tr>
<td></td>
<td>Two annual planning and review workshops held organised</td>
<td>Participatory planning and review process undertaken</td>
<td>2013 and 2016</td>
<td>$25,000</td>
<td>National Review in Phnom Penh and Siem Reap</td>
</tr>
<tr>
<td></td>
<td>Monitoring and coordination conducted in eye unit established.</td>
<td>Project delivered on time, within cost and of a high quality standard.</td>
<td>2016–2016</td>
<td>$62,065</td>
<td>Monitoring coordination conducted by NPEH.</td>
</tr>
</tbody>
</table>
In 2009 the Australian Labor Party amended its National Platform, stating that it ‘will ensure its aid program has an increased focus on… preventable blindness.’ This shift is reflective of growing international awareness and political momentum.

In 2003, World Health Assembly Resolution WHA 56.26 reconfirmed the global mandate of VISION 2020, urging all member states to reinforce VISION 2020 efforts; and in 2006 the World Health Assembly expanded upon this with Resolution 59.25, which urged Member States to build upon blindness prevention efforts nationally, regionally and internationally.


The Action Plan’s objectives are:

- increasing political and financial commitment to eliminating avoidable blindness
- facilitating the preparation of evidence-based standards and guidelines for cost-effective interventions
- reviewing international experience and sharing lessons learned and best practices in implementing policies, plans and programs for the prevention of blindness and vision impairment
- strengthening partnerships and coordination between stakeholders involved in preventing avoidable blindness
- collecting, analysing and disseminating information systematically on trends and progress made in preventing avoidable blindness globally, regionally and nationally.

These will be achieved by the following activities:

- collecting reliable and standardised epidemiological data, and developing an improved mechanism for collecting standardised information on human resources, infrastructure, and available technologies
- including blindness prevention in WHO country cooperation strategies and national health development plans, and enhancing the provision of expert advice and technical support to Member States where blindness and vision impairment are a major health problem
- establishing national committees and programs for eye health and blindness prevention
- ensuring that low and middle income countries have comprehensive national plans containing targets and indicators for the improved provision of eye health-care services
- monitoring and responding to trends in the causes of avoidable blindness. Over the past decade, major progress has been made in controlling communicable causes of blindness and vision impairment, and there has been a progressive increase in age-related chronic eye conditions
- providing support to those Member States that have not developed blindness-prevention programs, and integrating the eye-health agenda and its impacts on poverty alleviation in the overall development agenda
- building upon major international partnerships that have been developed over the past decade by improving coordination and information exchange between all stakeholders
- assisting with the equipping of secondary and tertiary eye-care centres in low-income countries, training more eye care personnel, and redressing the distribution of the available workforce between urban and rural areas
- mobilising resources for blindness-prevention activities by reviewing current approaches to financing eye-health systems, and highlighting the socio-economic impact of blindness, the cost effectiveness of eye-health interventions, and the financial benefits of early prevention of blindness and vision impairment.
Appendix 4 — Global action

By funding the next eight years of Vision 2020 Australia’s Regional Plan, the Australian Government can continue to lead global efforts in this area, and meet the obligations established by the World Health Assembly’s Action Plan.

It is also important that the Australian Government continues to advocate for increases in eye care funding from national governments, and for the elimination of avoidable blindness to be elevated on the agendas of stakeholders outside of the Asia Pacific.
Appendix 5

Vision impairment and the Millennium Development Goals

MDG 1: Eradicate extreme poverty and hunger

Studies have demonstrated that vision impairment is both a cause and consequence of poverty. Globally, the prevalence of blindness is five-fold higher in poor than rich countries, and research in India and Pakistan has shown that poor people are more likely to be blind.24 In 2005-2006, a study showed that people with cataract in Kenya, the Philippines and Bangladesh were poorer than those with normal sight, and demonstrated the need for increased cataract surgeries for poor people.25 In Cambodia, a survey conducted with post-operative cataract patients showed that over 90 per cent of respondents said their quality of life had improved after sight-restoring surgery, that they no longer needed anyone to look after them, and that they could assist in cultivating crops and working around the house.26

Extrapolations at a global level have shown that a successful global VISION 2020 eye care program could prevent more than 100 million cases of blindness between 2000 and 2020, with savings of at least US$102 billion, which would otherwise be lost to reductions in productivity associated with blindness. And in 2007, the global economic productivity loss in international dollars ($) associated with the burden of vision impairment was approximately $427.7 billion before, and $268.8 billion after, adjustment for country-specific labour force participation and employment rates. With the same adjustment, but for country-specific labour force participation and employment rates. With the same adjustment, but assuming no economic productivity for individuals aged ≥ 50 years, the potential productivity loss was approximately $121.4 billion.27

With appropriate funding, vision impairment can be substantially reduced and certain conditions can be effectively eliminated. In Vietnam and Morocco, for instance, sustained effort by governments, international agencies and the eye care sector has resulted in the elimination of trachoma as a major public health problem. In Gambia, the 10-year National Eye Care Program from 1986 to 1996 led to reductions of 40 per cent in the prevalence of blindness, including the elimination of over half of all trachoma.28

In West Africa, efforts since 1974 to eliminate onchocerciasis, through spraying larvicides, providing essential drugs through a public-private partnership with the U.S. pharmaceutical company Merck, and strengthening disease surveillance and public health management, has led to the effective elimination of the disease, the prevention of more than 600,000 cases of blindness, and the creation of 25 million hectares of arable land.

The economic return rate, a measure of the total economic benefit of a programme compared with its total cost, has been estimated to be a highly satisfactory 20 per cent. The economic return rate of the current African Programme for Onchocerciasis Control, which covers the remaining 19 endemic countries, is projected to be 18 per cent.29

MDG 2: Achieve universal education

Approximately 90 per cent of vision impaired children in developing countries are deprived of schooling. Lack of infrastructure, affordable health care, accessible and suitable school materials and qualified teachers prevent vision impaired children from attending school in many low income countries. Blindness among adults in the family may also result in decreased school attendance and performance, as blind adults are dependant on school aged children for care.

MDG 3: Promote gender equality and empower women

Women are affected by blindness and vision impairment to a much greater degree than men. A review of population-based surveys carried out between 1980 and 2000 showed that, in people aged older than 50 years, blindness is about 40 per cent more common in women than men. Since then, a large number of national surveys and assessments have confirmed these earlier findings. Surveys have revealed that women account for approximately 64 per cent of the total number of blind people globally, and that in some areas women are half as likely to be able to access eye care. Studies indicate that women generally have less access to cataract services, and that girls are more likely to have trachoma than boys.30

Appendix 5 — Vision impairment and the Millennium Development Goals

Programs funded under the initial Avoidable Blindness Initiative allocation address the gender discrimination inherent in eye health. CBM’s work in Takeo, Cambodia, and Nghe An and Son La provinces, Vietnam, is adopting a holistic approach to addressing gender in community eye health, including through human resource development, the inclusion of women in leadership and decision-making positions, provision of surgical services, increased quality of training and support, increased service accessibility for women, and collection and analysis of quality quantitative and qualitative data disaggregated by gender.

MDG 4: Reduce child mortality

Up to 60 per cent of children in low income countries die within two years of becoming blind, and approximately 500,000 children become blind each year. Many of the conditions associated with child blindness are also causes of child mortality (premature birth, measles, congenital rubella, vitamin A deficiency, and meningitis).

While all Avoidable Blindness Initiative programs contribute directly or indirectly to lowering the risk of childhood mortality through childhood blindness control interventions and promoting basis public health care, The Royal Institute for Deaf and Blind Children’s project addressing Fiji’s National Plan for Vision Impaired Children is specifically focused on developing Fiji’s human resource capacity in child eye health, and developing partnerships between key stakeholders in this area. Furthermore, the monitoring and evaluation framework utilised by Global Consortium members specifically focus on the needs of children, including through the disaggregation of data to ensure that specific needs are addressed.

The Australian Government has acknowledged that MDG 4 will not be met unless thereis an increase in funding and development of national strategies to ensure effective allocation of resources. By providing further funding for the elimination of avoidable blindness, the Australian Government can continue to lead by example in reducing vision impairment among children, thereby reducing child mortality.

MDG 6: Combat HIV/AIDS, malaria and other diseases

People living with disability are equally, or more, exposed to risk factors that lead to infectious diseases and have limited access to outreach and treatment services. Global Consortium programs address this by reducing the prevalence of vision impairment, and by addressing the needs of people with disabilities. Global Consortium programs also contribute to reducing the impact of HIV/AIDS, malaria and other diseases by utilising a public health approach which improves eye health services, and by providing that includes maternal and child health care, health education, and good nutrition.

MDG 7: Ensure environmental sustainability

People in low-income countries living with a disability are likely to have lower standards of housing conditions and have less access to clean water and sanitation. Facilitating access to clean water and sanitation is one element of Global Consortium programs, particularly in efforts to eliminate trachoma in the Pacific.

MDG 8: Develop a global partnership for development

The global VISION 2020 initiative, and Vision 2020 Australia’s Global Consortium, represent unique and effective responses to MDG 8. The Partnership Framework developed with AusAID, and the fostering of strong partnerships between Ministries of Health, international and national organisations, professional organisations and civil society groups, ensures that the benefits of partnership are experienced at national, regional and community levels. They directly benefit the poorest of the poor, enable expertise to be shared and built upon, and minimise program overlap and inefficiency.

The Global Consortium is an excellent case study for MDG 8, and further funding will ensure that the Australian Government continues to contribute to this partnership.

30 The Honourable Bob McMullan while launching the report Investing in Maternal, Newborn and Child Health, the Case for Asia and the Pacific, 3 May 2009.
Vision 2020 Australia

Level 2, 174 Queen Street
Melbourne Victoria 3000

Telephone +61 3 9656 2020
Facsimile +61 3 9656 2040
Website www.vision2020australia.org.au

National body working in partnership to prevent avoidable blindness and improve vision care

We are a signatory to the Australian Council for International Development Code of Conduct. The Code requires members to meet high standards of corporate governance, public accountability and financial management.

www.acfid.asn.au