

INVESTING IN VISION

**THE COSTS & BENEFITS OF ENDING
AVOIDABLE BLINDNESS**



The Fred Hollows
Foundation

THE AUSTRALIAN CHARITY OF THE YEAR 2013



pwc

FRED BELIEVED RESTORING SIGHT WAS MONEY WELL SPENT

Now we have the evidence.

A series of reports commissioned from PwC by The Fred Hollows Foundation have calculated the economic benefits of eliminating avoidable blindness and visual impairment. The return on investment that can be achieved in developing countries will change the way you think about restoring sight.

"I stand for spreading the benefits of modern medicine as widely as possible and improving people's living standards."

- Fred Hollows

Outback Australia: Fred Hollows tests the eyes of an Indigenous Australian man in the 1990s. Fred dreamt of a day when all Australians had the same opportunities.

COVER IMAGE: MICHAEL AMENDOLIA
PHOTO (THIS PAGE): STEPHEN ELLISON



PHOTO: MICHAEL AMENDOLIA

Myanmar: Cataract patients in Bago wait for their patches to come off. After decades of economic and political isolation, The Foundation is helping to strengthen the country's eye health system.

MESSAGE FROM THE CEO



PHOTO: MICHAEL AMENDOLIA

First some good news. Avoidable blindness is declining worldwide thanks to eye care organisations like The Fred Hollows Foundation. And now for the bad news – **32.4 million people are still blind** and a further 191 million are visually impaired.

Ninety per cent of these people are in developing countries, where the majority live on far less money – with far fewer health services – than most Australians. With this great personal loss of independence and dignity comes an economic drain – they and their carers cannot work.

Collectively, this **costs developing countries around \$49 billion*** per year in lost economic activity through the effects of a smaller workforce.

Critically, we know that **2 in 3 blindness cases are preventable or treatable** and that helping just one person to see creates a positive ripple effect throughout their community.

The results of the landmark study Investing in Vision show the economic benefits of eliminating blindness in developing countries far outweigh the costs. Our approach is one of partnership. We invite you to join us as we work towards making Fred's dream a reality.

Brian Doolan
Chief Executive Officer

32.4 million 

People in the world are blind and a further 191 million are visually impaired. **

* All figures in this document are in 2009 US dollars.
** Source: 2010 Global Burden of Disease Study.

ENDING AVOIDABLE BLINDNESS IS ACHIEVABLE

Ending avoidable blindness in the developing world can be achieved for as little as \$2.20 per person per year – less than a cup of coffee.

That's what a team of PwC health economists discovered when they sat down to calculate the cost.

PwC found that avoidable blindness could be eliminated in the developing world for \$128.2 billion – which equates to an investment on top of what is already spent on eye health of just \$2.20 per capita per year for 10 years.

This is the expected cost to build eye health systems to such a size that they can clear the existing backlog of avoidable blindness and sustainably treat new cases as they arise.

WHILE ACHIEVABLE - IT'S NOT POSSIBLE WITHOUT YOU

This ambitious goal cannot be achieved without eye health organisations like The Fred Hollows Foundation and supporters like you. The modest cost is still too much for many of the countries The Foundation works in, like Burundi, one of the poorest nations in the world. Putting it in perspective, Burundi's annual median health spend is less than \$20 per person compared to over \$6,000 for the average Australian. This tiny health budget is channeled into combating infectious diseases like AIDS/HIV and malaria and reducing infant and maternal mortality – leaving sparse funds to end avoidable blindness.

AS LITTLE AS
\$2.20 

Per person per year in the developing world is enough to end avoidable blindness. But even this is too much for the poorest countries.*

* Calculated using the estimated additional spending required between 2010 and 2020, divided across the total developing world population.



Burundi: Thanks to you, Cesaria, 3, had her sight restored - by the country's only childhood ophthalmologist.



PHOTO: MICHAEL AMENDOLIA
Bangladesh: One in three lifesavers tested by The Foundation at the dangerous Cox's Bazar Beach needed glasses. In many places in Bangladesh it is uncommon to find anyone who has ever had an eye test.

HOW THE MONEY SHOULD BE SPENT

\$128.2 billion will restore sight to people needing it today and build the eye health systems of the future to treat new cases.

CLEAR THE BACKLOG (\$13.6 billion cost)

Sight will be restored to millions of people currently living with treatable eye disease – and those who go blind in the next decade. This investment includes operations, procedures and treatments for people with conditions such as cataract, glaucoma, diabetic retinopathy, trachoma, onchocerciasis (river blindness) and uncorrected refractive error.

FIRST-CONTACT EYE HEALTH SERVICES (\$56.6 billion cost)

A major investment in primary healthcare – the first contact people have with the health system – will make it commonplace in the developing world for eye disease to be identified and treated before it causes blindness. Through the training of a global workforce, millions of people living in remote and under-served

areas will be able to access an eye check-up by a frontline health worker, a glasses fitting by an optometrist or an eye test by an orthoptist for the first time. Primary healthcare helps people avoid blindness through preventative measures and speeds up access to hospital treatment for serious conditions.

HOSPITAL EYE HEALTH SERVICES (\$58 billion cost)

This investment will train an army of ophthalmologists, cataract surgeons and ophthalmic nurses to restore sight to millions of people with advanced but treatable eye disease. Along with improving surgical rates, it will fund the operating theatres and associated medical supplies that are desperately needed in the developing world.

TOTAL COST: \$128.2 BILLION

THE BENEFITS

Restoring sight transforms the quality of life of people living with blindness - and their carers.

And along with the human value, ending avoidable blindness will pay big dividends for developing nations – it is expected to inject **\$517.1 billion** into the poorest economies over a decade.

FINANCIAL INDEPENDENCE (\$491.8 billion economic gain)

The main benefit for individuals and their carers is financial independence. A recent study of Foundation-supported cataract patients in Vietnam found that following eye surgery a large number of people **increased their work hours and could now pay their household bills**, rent and medical expenses. Those doing unpaid work in the home were able to perform essential tasks for daily living, freeing their carers - often children - to return to work or school.

REDUCED DEATHS AND INJURIES (\$23 billion economic gain)

The benefits extend even further. Falls are a major side effect of blindness and vision impairment worldwide, causing injury and death. Restoring sight lowers the risk, reducing hospital costs. A second study in Vietnam revealed an 83 per cent reduction in the number of falls people said they had after their cataract surgery, compared to before.

TRUE RETURN MUCH HIGHER

Importantly, this is a conservative estimate and the true return on investment is much higher. Many of the results restored sight brings – **longer and healthier lives, reductions in extreme poverty, increased school attendance, gender equality, independence and self-esteem** - cannot be quantified with a dollar value.

TOTAL GAIN
**\$517.1
BILLION**

Economic benefit of eliminating avoidable blindness in the developing world.*



A woman in central Vietnam smiles - she can see after a long time without sight.

* Includes a \$2.2 billion saving from avoided deadweight loss.



Lao PDR: Dr Phetsamone waits for the backup generator to turn on so he can begin surgery at an eye clinic in Oudomxay Province. Power blackouts are one of the many challenges facing his team as they work to clear the cataract backlog in the remote mountainous region.

A STRONG RETURN ON INVESTMENT

Every \$1 invested generates on average \$4 of economic gain.



ROI IN THE DEVELOPING WORLD

\$1 = **\$4**
INVESTED = ECONOMIC GAIN

In the world's poorest countries, supporting blindness elimination stimulates the broader economy – while bringing life-changing benefits to individuals and their carers. The investment is cost-effective and will help generations of people to come.

This is the strongest argument that eliminating avoidable blindness is amongst the unpicked low-hanging fruit of economic development and health improvement.

The next question is – what is the value to individual countries?

Razia Beghim (right) of Pakistan and her daughter Shazia rejoiced after Razia's sight was restored through cataract surgery.



PAKISTAN INVESTING IN VISION

Since 1998, The Foundation has helped halve the rate of blindness in Pakistan from 1.8% of the population to 0.9%.

The country, with its 184.7 million residents, has potential to become one of the world's largest economies. Over 7.6 million people are blind or visually impaired and 50.7 per cent are of working age. They are unable to contribute to and benefit from Pakistan's rising prosperity.

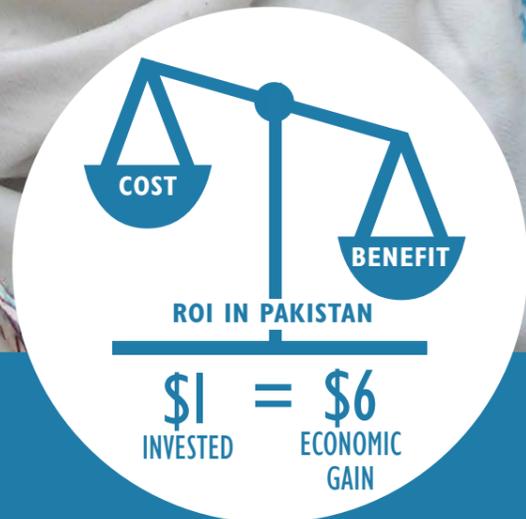
The main causes of blindness – cataract, refractive error (the need for glasses) and glaucoma – are treatable, yet most people live in poor, rural areas and are unable to access even basic eye health services. Women are particularly disadvantaged, as they are not expected to travel alone.

The estimated cost to eliminate avoidable blindness in Pakistan is \$11.6 billion, delivering a \$70 billion benefit to the country's economy.

RAZIA'S STORY

"I am totally dependent," said Razia before her cataract operation. The mother of three was blind. She needed help to walk and the family relied on daughter Shazia, 12, to do most of the household chores and cooking. The family is too poor to afford travel and surgery, so Razia's blindness was left untreated.

"I really wish to see my children, I want to do cooking for them. I want to take care of them. I want to do my housework. I can't do anything due to blindness," said Razia. With support from The Foundation, Razia travelled to the Mayo Hospital in Lahore where her sight was restored. Now that she has regained her independence, her daughter can focus on her education.



CHINA - YUNNAN PROVINCE

INVESTING IN VISION

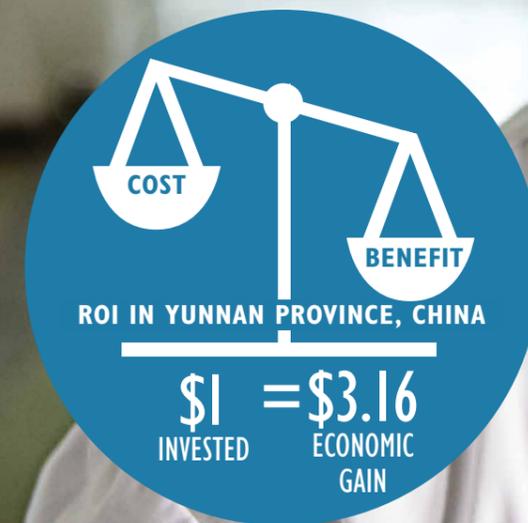
China's rising wealth isn't reaching everyone - deep pockets of poverty still exist.

The world's fastest growing economy is also home to 17 per cent of the world's blind. In Yunnan province alone, over 1.2 million people are needlessly blind or visually impaired, mostly through cataract and refractive error. Our focus is providing hands-on learning – something that is not yet included in the surgical training of all Chinese eye doctors. We are also trying to influence the Chinese Government to replicate our eye care model in other needy provinces.

The estimated cost to eliminate avoidable blindness in Yunnan province is \$1.5 billion, delivering a \$4.8 billion benefit to the local economy.

DR WANG'S STORY

"When I first started working here, I could only treat problems like small wounds," Dr Zongfa Wang said from his hospital in southern China. "Then three years ago, I spent two weeks being trained in cataract surgery by a Fred Hollows Foundation surgeon. "A cured patient helps the whole family, because it means someone – usually a young woman – doesn't have to look after them anymore, and is free to return to school or work. For people in their 40s it means they can get a job and improve their family's finances."



Dr Wang loves his job. "When my little girl starts asking what I do for a living, I can tell her that I help people see," he said.

KENYA

INVESTING IN VISION

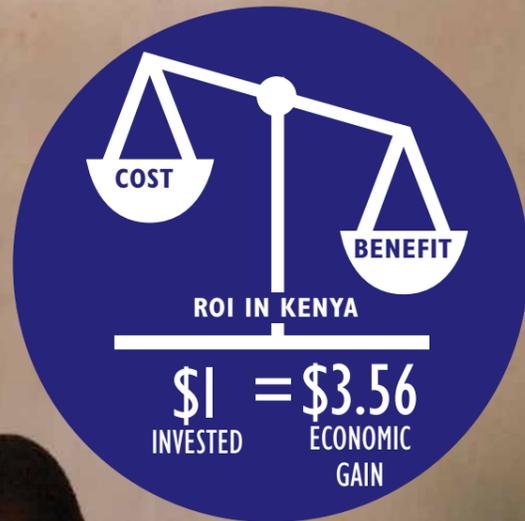
Kenya's health system does not yet have the ability to reach the nation's most vulnerable people.

With only two ophthalmologists for every million people, there is a backlog of over 100,000 cataract cases to clear. The Foundation is working with Kenyan hospitals to increase cataract surgical rates and train clinical workers to deliver specialist care in remote regions. Trachoma is the other leading cause of blindness – seven million people are at risk of contracting the infectious disease.

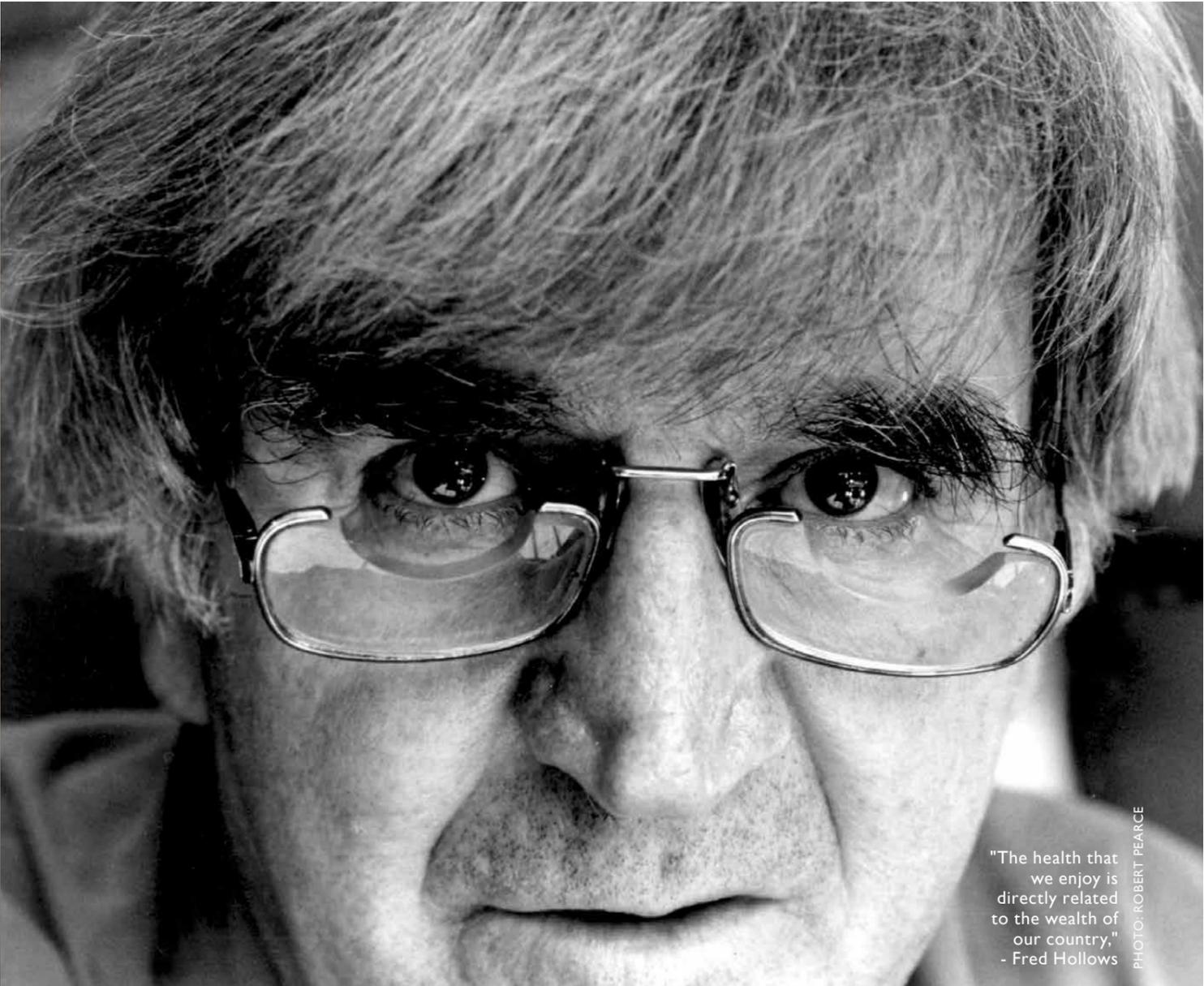
The estimated cost to eliminate avoidable blindness in Kenya is \$211.8 million, delivering a \$751.5 million benefit to the country's economy.

GEORGE AND ALICE'S STORY

"In the village here, people who don't go to school are living desperate lives," said Boniface, father of George, 4, and Alice, 5. Born with cataracts in both eyes, the siblings were shy and withdrawn. The nearest surgical services are two hours from the family home in a poor village near the Ugandan border and the family had no money to pay for transport. Since The Foundation supported sight-restoring surgery for George and Alice, they can finally go to school. "This has been my dream," said Boniface. "I never did it. Now let my children do it."



George and Alice draw while their mother looks on - just days after their sight was restored.



"The health that we enjoy is directly related to the wealth of our country," - Fred Hollows

PHOTO: ROBERT PEARCE

LET'S GET THE JOB DONE

Fred said "Don't ever half do a job, don't ever compromise. Slog away until you get the job done" — and that's what we intend to do.

Ending avoidable blindness within the next decade is achievable.

Right now, 70 per cent of the cost to eliminate avoidable blindness is available — leaving an average annual shortfall of \$12.8 billion.

Working with our partners, The Foundation is playing a vital role in closing this expenditure gap — by restoring sight, ending extreme poverty and stimulating economies.

The Fred Hollows Foundation has a proven track record. In just over 20 years, we have helped restore sight to millions of people in over 40 countries.

We've done this through building clinics, providing medical equipment and training doctors. We've helped strengthen communities and empowered others to take action.

We seek to educate and influence national and global decision makers to invest more in eye health — our ultimate goal is to one day walk away, job done.

But we can't do it without you.

Help us end avoidable blindness within a decade.

Vietnam: A child receives an eye test.



PHOTO: BRENDAN ESPOSITO

WE CAN END AVOIDABLE BLINDNESS WITHIN A DECADE



The Fred Hollows
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