

SEVA POLICY PAPER

Eye health: A best buy in global health and development

November 2023



Why Prioritize Eye Health?

1 Eye health is a best buy in global development, yielding \$36 in benefits for every dollar invested - six times greater than the typical development intervention.



A ground-breaking systematic review, which looks at 21 case studies across 10 low-and-middle-income countries, shows that the typical return from eye health investment is 36-to-1. Refractive error and cataract correction outpaces typical returns from global development interventions **6 times over**.

2 The scale of the problem is huge.

1.1 BILLION
people now live with preventable vision impairment, which is predicted to rise to **1.8 BILLION** people by 2050.



Vision impairment is one of the most common afflictions in the world, with 1.1 billion people globally living with a vision impairment that is preventable or treatable. This is set to increase by 55% by 2050 due to aging and lifestyle factors.

3 The problem is solvable. Solutions are inexpensive, proven and scalable.

Proven eye care remedies are scalable and inexpensive, ensuring clear vision costs less than



to see clearly with technologies we know work.



Current solutions to improve eye health cost approximately \$10 to provide one person with good vision for one year and have been around for centuries. They are remarkably feasible, require no further technological advancement, no shift in agendas, and no substantial behavioral change, making them easy to scale - the only barrier is funding.

Eye Health: A 36x Best Buy Investment*

A ground-breaking study, published in the Bulletin of the World Health Organization, demonstrates that **every dollar spent on refractive error or cataract correction produces \$36 in benefits**, on par with other ‘Best Buys’ in international development.¹ To uncover this finding, a team of researchers first conducted a systematic review, identifying all peer-reviewed studies published since 2001 that estimated productivity, learning and welfare impacts from correcting refractive error and cataract. Using benefit-cost analysis, the report meticulously and transparently quantifies the return on investment of 21 identified studies across 10 low-and-middle-income countries. With a median return of **\$36 for every \$1 invested** the paper presents an unequivocal case for action on eye health.

How can we explain this high return? An assumption of vision is embedded in the fabric of society, be it at work, school or in the home. Correcting visual impairment leads to plausibly large improvements in productivity, learning and household income. In contrast, the costs of correcting visual impairment are modest, typically less than \$10 per year of improved vision. The technologies to correct vision – glasses and cataract surgery – are proven with demonstrated effectiveness in low-and-middle-income country contexts.

Six times more good than the typical intervention

Eyecare Intervention Returns Compared to Interventions in Other Areas

Typical benefits per \$1 spent



At a \$36 to \$1 return, refractive error and cataract correction is **6 times more efficient than the typical development intervention**. Eye health also outpaces typical returns of other high profile health domains such as nutrition and non-communicable disease. Moreover, the return from eye health is comparable to other “Best Buys” in global health and development.

The paper’s findings, together with other recent reports,^{2, 3} have pushed the sector towards a watershed moment in making the case for preventing blindness and visual impairment from cataract and refractive error.

Source: Wong et al., The case for investment in eye health: systematic review and economic modeling analysis, *Bulletin of the WHO*, in press.



* This Policy Paper is based on research conducted by the Seva Foundation, in collaboration with researchers from Mettalytics, Johns Hopkins University, University of San Francisco, University of California San Francisco, Aravind Eye Care System and LV Prasad Eye Institute, forthcoming in the *Bulletin of the World Health Organization*.

Because eye health is about so much more than just health

Vision impairment is about so much more than a decline in health. It immediately signals a decline in learning,⁴⁻⁶ productivity,⁷ and agency,^{8,9} with outsized impacts for women.² Vision is required in nearly every aspect of culture, country, and community. Improving access to eye health services is a key enabler to achieving the Sustainable Development Goals, particularly those tied to overall health, poverty, economic productivity, education, and equality.¹⁰

When discussing value-for-money, policymakers in the health sector typically weigh costs against health benefits only. This approach disadvantages eye health, which hosts benefits that are larger in non-health arenas, **such as productivity, learning and income improvements**. For instance, the disability weight for blindness indicates an 18.7% annual health loss.¹¹ In contrast, the productivity loss for the blind is at least 30.2%.¹² The disability weight for refractive error indicates a 1.1% (near-sightedness) or 0.3% (mild vision impairment) annual health losses.¹¹ However, studies providing glasses in agriculture,^{7,13} manufacturing^{14,15} and school settings⁴⁻⁶ suggest annual productivity losses that are as much as 20 times greater than the corresponding health losses.

One of the critical contributions of the paper is its representation of the **full picture** of losses incurred from visual impairment and blindness, including productivity, employment, learning, and caregiver burdens; as well as the potential benefits arising from these averted losses. Ignoring non-health benefits associated with visual impairment has resulted in a de-prioritization of high-returning interventions which are both inexpensive and feasible. Most critically, as a condition of socio-economic development and agency, the importance of eye health is often overlooked, excluding it from key development discourses such as the Sustainable Development Goals. This isolation on the global stage has meant that despite the availability and cost-effectiveness of interventions to address preventable blindness and visual impairment, solutions remain under-implemented and under-funded.

Donors can do
SIX TIMES
more good by investing
in eye health compared
to a typical investment
across all of global
development.



The Time to Act is Now

While capacities, technology, and the evidence needed to improve quality access to eye health have been well-established, progress cannot be made without **advocacy for inclusion** on development agendas, and **investment in scaling services**. Placing eye health at the top of the global development agenda will demand engagement across all levels - from individual industries up to international organizations.

For businesses such as farms, factories, and others whose work is heavily impacted by eye health, ensure that vision screening and referral processes are in place, promoted, and accessible to workers.

For communities, including educators, health workers, families, advocate with those around you to ensure family members, workplaces, and healthcare facilities include visual screenings in their services, and promote annual screening within your family, work, and community circles.

For donors and decision makers, the benefits of integrating eye health interventions into development agendas are far reaching and demand a comprehensive approach to implementation.



Donors email jnestingen@seva.org and let's start a conversation about how we can generate \$36 in social benefits for every \$1. For media inquiries email: schada@seva.org. For academic inquiries including funding more research, email bwong@seva.org.

INTERESTED
IN HELPING
US SCALE EYE
HEALTH?

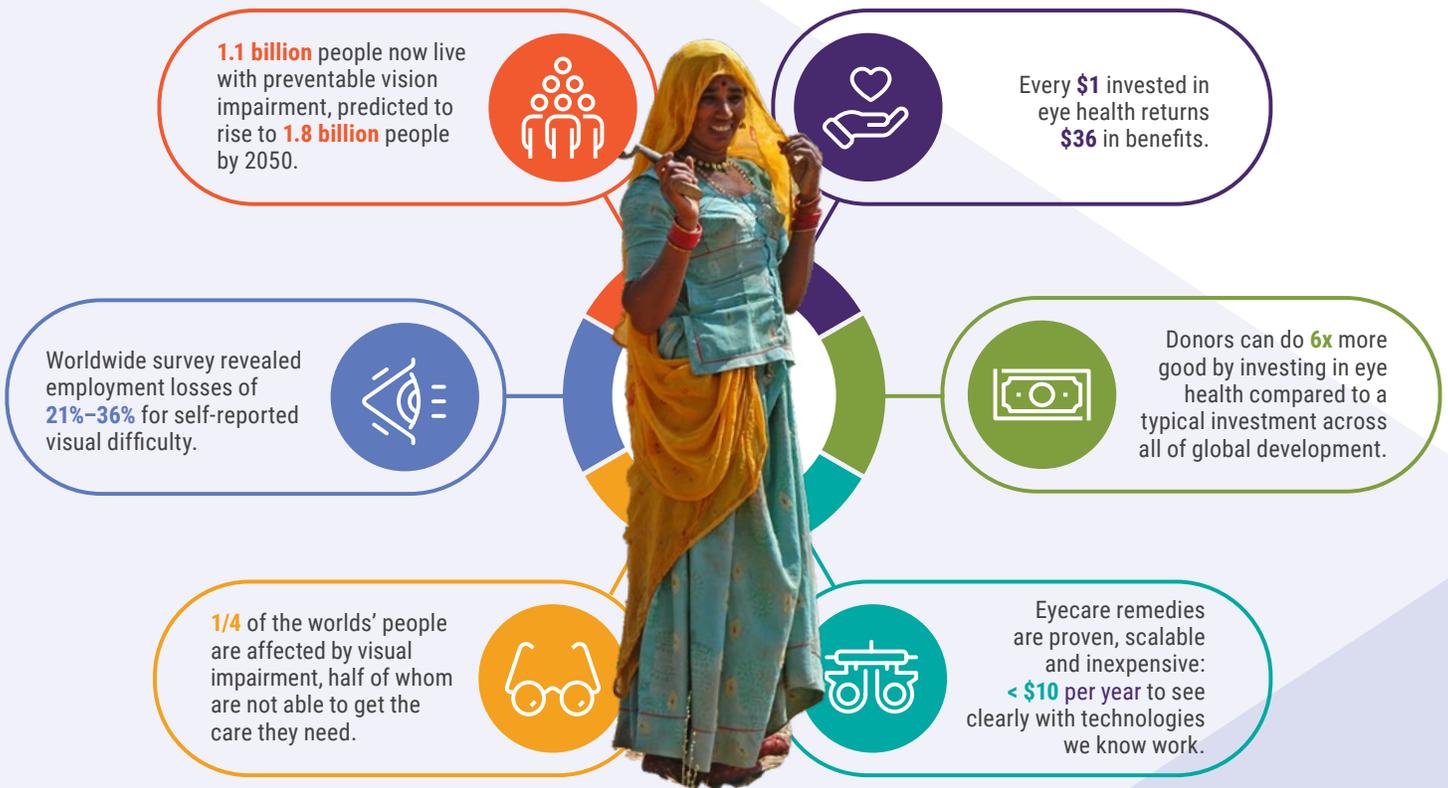
Eye Health: An Implementation Annex for Policy Makers

The rationale for investing in eye health has never been clearer. But evidence without political will and policy support remains a theory. To work, it needs to be implemented. Given the scale, scope, and social contributions tied to the implementation of eye health interventions, governments and international governmental organizations are uniquely positioned to play a significant role in implementation efforts - funding, scaling, and maintaining access to quality eye health services for those in need.



Recommendations

- 1** Increase resource allocation for key eye health interventions promising high impact per dollar invested: vision screenings, refractive error correction and cataract surgery.
- 2** Develop an intersectoral taskforce for the Eradication of Preventable Blindness and Visual Impairment to navigate implementation and long-term policy alignment.
- 3** Embed eye health in annual and long-term development agendas at the national, regional, and international levels across forums tied to trade, industry, agriculture, health, and education.
- 4** Diversify the evidence base. While the case for eye health is clear across the board, context specific research will enable targeted action that will further increase the benefits tied to eye health interventions. For example, there could be more primary research on the impacts across agriculture, industry and schools or greater integration of vision-economics within existing data collection efforts such as regular and household surveys. These would provide the information required to improve targeting and anticipatory approaches in the field.



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