

AT2030
Case Study

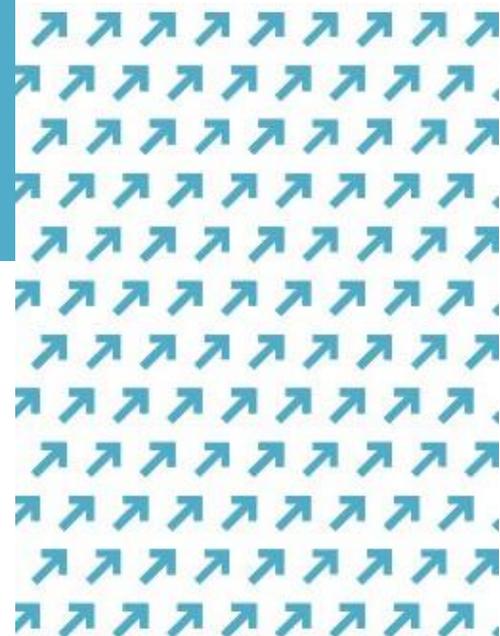
The Liberia Evidence Lab: A new scalable model to deliver School Eye Health

Prepared by
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Cluster 3 Country Implementation
Country Capacity

Country
Liberia

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About AT2030

The AT2030 programme tests ‘what works’ to improve access to Assistive Technology (AT) and will invest £20 million over five years to support solutions with a focus on innovative products, new service models, and global capacity support. The programme will reach nine million directly and six million more people indirectly to enable a lifetime of potential through life-changing AT. The programme is funded by UK aid and led by the Global Disability Innovation Hub.

Under Cluster 3: Country Implementation of the AT2030 programme, CHAI is partnering with country governments to identify opportunities to drive availability and affordability of AT. Below is a case study of one such piece of work where CHAI and AT2030 supported EYElliance to pilot a new model of school eye health in Liberia.

Context

Uncorrected vision impairment leads to poorer education outcomes

Eighty percent of all learning during a child’s first 12 years occurs through vision.¹ Good vision is critical to a child’s ability to benefit from an educational experience. Children with an uncorrected visual impairment lag in school enrolment, learning outcomes, and completion of primary school.

Myopia, or near sightedness, is the most common cause of visual impairment in children and the number of children with myopia is rapidly growing. Worldwide, 312 million children suffer from myopia, which is usually diagnosed between the ages of 8 and 12. The condition is easily corrected with eyeglasses.² Yet only a fraction of children have access to eyeglasses.

¹ Wodon, Q, Male C, Nayihouba A, and Smith E. ‘Looking Ahead: Visual Impairment and School Eye Health Programs.’ *The Price of Exclusion: Disability and Education Notes Series*. (The World Bank, 2019). Available from: <http://pubdocs.worldbank.org/en/880171575325123775/WorldBank-InclusiveEducationVisualImpairment-v7-WebReady.pdf>

² Rudnicka AR, Kapetanakis VV, Wathern AK, et al., ‘Global variations and time trends in the prevalence of childhood myopia, a systematic review and quantitative meta-analysis: implications for aetiology and early prevention’, (The British Journal of Ophthalmology, 2016)

A simple, affordable, and effective solution exists

Research shows that school eye health (SEH) can safely and accurately identify and treat children with vision problems in low- and middle-income countries. SEH is based on three activities:

- 1) Teachers, school nurses, or other trained personnel screen children for vision problems on-site at schools;
- 2) Children identified with vision problems are examined by an eye health professional who determines the eyeglasses prescription or refers them for more advanced care;
- 3) Children who need eyeglasses are provided with a pair.

Evidence shows that if trained, teachers can successfully identify children with vision impairment.³ SEH is also affordable for public programs working with small budgets. The Disease Control Priorities Network (DCP), a Bill & Melinda Gates funded program to systematically review of evidence on the cost effectiveness of health interventions, considered school vision screenings to be cost-effective and part of an essential package of services for school-age children.⁴ Following a recent costing analysis, the World Bank determined the intervention to be affordable for many governments.⁵

The Government of Liberia included eye health in its National School Health Policy and requested implementation support

Nearly 10 percent of the 1.4 million school-aged children in Liberia are estimated to have myopia and need eyeglasses. The Ministry of Education included eye health in Liberia's first-ever National School Health Policy in 2018. Until then, few children had access to those services. Prior in 2016, recognizing the potential for accelerating the impact of investment in eye health, President Sirleaf requested that EYElliance, a multi-sector coalition that drives the global strategy to close the gap in access to eyeglasses, advise the government on a comprehensive eye health strategy, which now includes national scale up of SEH.

³ Paudel et al. 2016; De Fendi et al. 2008; Khandekar et al. 2009; Ostadi Moghaddam et al. 2012; Sharma et al. 2008; Wedner et al. 2000 as reference in Wodon, Q, Male C, Nayihouba A, and Smith E. 'Looking Ahead: Visual Impairment and School Eye Health Programs.' *The Price of Exclusion: Disability and Education Notes Series*. (The World Bank, 2019). Available from: <http://pubdocs.worldbank.org/en/880171575325123775/WorldBank-InclusiveEducationVisuallImpairment-v7-WebReady.pdf>

⁴ Bundy DAP, de Silva N, Horton, S, Jamison DT, and Patton GC, 'Optimizing education outcomes: high-return investments in School Health for increased participation and learning', (The World Bank, 2018). Available from: <http://dcp-3.org/resources/child-and-adolescent-health-and-development-optimizing-education-outcomes>

⁵ Wodon, Q, Male C, Nayihouba A, and Smith E. 'Looking Ahead: Visual Impairment and School Eye Health Programs.' *The Price of Exclusion: Disability and Education Notes Series*. (The World Bank, 2019). Available from: <http://pubdocs.worldbank.org/en/880171575325123775/WorldBank-InclusiveEducationVisuallImpairment-v7-WebReady.pdf>

The Challenge

SEH rollout has been fragmented and underfunded

While the Liberia government believes that SEH is an effective solution, implementing the changes required was challenging. Insufficient staff, lack of normative guidance, lack of basic screening tools, and weak surveillance systems made rollout difficult. To date, NGOs have been the main service providers in the country, but provision is fragmented as they operate independently from each other district by district, without consistent, comprehensive coverage across the country. For example, LV Prasad Eye Institute (LVPEI) and Sightsavers were working independently with the Government of Liberia in different regions and did not communicate on plans and activities. This approach led to fragmented procurement of eyeglasses and different approaches to provision.

At the same time, SEH funding is limited and not currently included in Liberia's school health package or as part of the inclusive education agenda. In Liberia, there was no dedicated budget line for SEH in either the Ministry of Education or Ministry of Health budget. Instead sustainability of these limited services is reliant on external resources.

Approach: The Liberia Evidence Lab

EYElliance assembled a consortium of eye health partners to advise the Ministry of Health and Ministry of Education on a comprehensive, government-led eye health strategy

In 2018, the Ministry of Education validated its first school health policy, which included eye health. The corresponding SEH plan was based on three broad principles: 1) national standardization of provision; 2) government ownership; and 3) filling of technical gaps with external expertise. The ministries of education and health collaborated with The Liberia Evidence Lab, a consortium of partners⁶ coordinated by EYElliance, to implement the SEH programme and lay the foundations for a broader eye health system. Each partner plays a specific role in the programme.

The goal is to reach all children in public primary and secondary schools in 12 of the country's 15 counties with school-based vision screening and free eyeglasses within four years. This represents 480,000 children or 58 percent of those attending public schools in Liberia.

⁶ Partners include: EYElliance, LV Prasad Eye Institute (LVPEI), 2.5 New Vision Generation, Our Children's Vision, OneSight, and Sightsavers

Support from the AT2030 programme enabled the implementation of a 50-school pilot in Montserrado County to demonstrate a model for scale-up

With funding from the AT2030 programme, EYElliance and LVPEI coordinated and delivered a pilot across 50 schools in Montserrado County. Montserrado is the smallest county by size, but largest by population, comprising one third of Liberia's population. Funding from other donors supported Sightsavers to pilot the model in two additional counties.

In the three pilot counties teachers received training and incentives for vision screening. Furthermore, support was provided for optometric technicians to visit schools, training of technicians to provide appropriate eyeglasses, provision of reading eyeglasses to teachers, shipping costs of eyeglasses to schools, treatment of simple eye conditions, and project coordination. Ready-to-clip glasses⁷ for children were donated by 2.5 New Vision Generation, which is the inclusive business arm of Essilor, the leading manufacturer of ophthalmic lenses globally.

Impact: what works

Through the pilot, approximately 50,000 children received eye screenings across all three counties

In Montserrado County, the AT2030-funded pilot screened 15,816 children and 663 teachers. Two-hundred-and-fifty-two children received eyeglasses and 164 children were referred for additional care. Half of the teachers that were screened received eyeglasses. Sightsavers reached an additional 33,000 children with screening in two counties.

The Liberia Evidence Lab plans to reach 200,000 additional students in three more counties in 2020, assuming no further school closures due to COVID-19. The remaining six counties will be covered in 2021, reaching more than 480,000 total students. In all, 3,764 teachers are expected to be trained on eye screening.

The Government of Liberia has committed to fund SEH from 2022 onwards

As a result of the pilot and the consortium's efforts, SEH will be included in the 2022 National Education Sector Plan, with the Ministry of Education adding financial responsibility to programme management once provision is scaled up. The Global Partnership for Education (GPE) is expected to provide significant budget support to

⁷ Ready-to-clip glasses allow for on-the-spot delivery of eyeglasses where pre-cut lenses equivalent to the wearer's prescription are popped into a ready-made frame

the ministry, making them a key partner in achieving SEH targets. Technical support will be provided by the Ministry of Health.

SEH has been promoted as an affordable means to achieving inclusive education

The Liberia Evidence Lab was used by the World Bank to inform a costing analysis and report on the benefits of SEH to achieving inclusive education.⁸ The World Bank concludes that *“In comparison to children without disabilities, because of the lack of school eye health programs, children with visual impairment have been shown to be at a disadvantage for the likelihood of ever enrolling in school, completing primary education, and being literate...School eye health programs can be used to provide better educational opportunities...[and] findings suggest that school eye health programs are affordable and should be a priority for ensuring that education systems are inclusive.”* Furthermore, Liberia Evidence Lab will be a case study in the upcoming UNESCO Global Education Monitoring report.

SEH is an entry point and critical building block to comprehensive national eye health coverage

EYElliance is also coordinating the introduction of vision screening and reading glasses provision to adults into Liberia's national community health assistant (CHA) programme. The consortium will pilot this work in November 2020 in River Gee County with 150 of the country's CHAs. This mutually reinforcing collaboration of SEH and CHA work in the same county includes standardised training materials, distribution of the same quality of glasses, and MoH coordinated referral systems of NGOs and national eye care providers. This convergence will be the first-time eye health services reach children and adults and provide follow-up care in Liberia with teachers screening children in schools, while community health assistants screen adults. Those who need glasses will either receive them on location or obtain prescription glasses from a government-supported Optometric Technician in a neighboring county. The creation of a new National Eye Health Program Manager at MoH and the recent hiring of a Pharmacist who will focus on the procurement and management of eyeglasses within the national medical supply chain ensure the sustainability of the referral network. National policies and strategies underpin all this work.

⁸ Wodon, Q, Male C, Nayihouba A, and Smith E. 'Looking Ahead: Visual Impairment and School Eye Health Programs.' *The Price of Exclusion: Disability and Education Notes Series*. (The World Bank, 2019). Available from: <http://pubdocs.worldbank.org/en/880171575325123775/WorldBank-InclusiveEducationVisualImpairment-v7-WebReady.pdf>

Next Steps

Following delays due to COVID-19 school closures, the consortium will continue to scale SEH nationally in Liberia in line with a timeline to handover to the Ministry of Education, with support from Ministry of Health, by 2022.

The Liberia Evidence Lab shows that SEH can successfully be scaled nationally within a short period of time, even in under-resourced and under-capacitated contexts. The Liberia Evidence Lab will be used as evidence to launch national SEH programmes in other low- and middle-income countries. More than 60 low- and middle-income countries' education plans are currently supported through GPE and could replicate this approach to provide screening and eyeglasses, while ensuring sustainable financing.