Vision for life
School eye health in Kenya

THE CHALLENGE
Treating eye health problems in childhood has lifelong benefits, but identifying which children need eye care and ensuring they receive treatment can be difficult.

In Trans Nzoia county, Kenya, most children live in isolated rural settlements, many miles from the nearest health centre. There is a desperate shortage of specialist eye health workers.

Vision screening is laborious and resource-intensive. When children are identified as having a vision problem but do not attend appointments for further treatment, it is challenging for staff to find out why.

As a result, hundreds of children miss out on good eye health, with negative consequences for their education and wellbeing that could last a lifetime.

THE SOLUTION
An innovative partnership has used Peek Solutions to improve the efficiency and effectiveness of eye health services for children in Trans Nzoia.

Teachers check children for visual impairments in school using the clinically-validated Peek smartphone vision check. The child is referred for a follow-up appointment if needed. Their parents or carers automatically receive SMS text message reminders about their appointment.

At the eye health centre, receptionists use Peek to monitor whether children attend their appointments. This allows eye health workers to track progress and send further reminders if needed. Health service managers use the data captured to understand the eye health programme’s progress and to help address any barriers which are preventing children from receiving treatment.
“It’s vital that we can use the resources we have as efficiently as possible, which is where the idea for Peek school eye health screening came from.”

Dr Hillary Rono, ophthalmologist and Peek lead in Kenya

WHY PEEK?

Peek enabled the programme partners to greatly improve the efficiency of their school eye health programme. Instead of travelling long distances to conduct screenings in schools, ophthalmic nurses could focus on treating patients. The Peek system also improved attendance at follow-up appointments with automated SMS text message reminders and eyesight simulation showing how the child’s eyesight compares to normal vision.

THE IMPACT

The Trans Nzoia school eye health programme has proved that Peek Solutions can improve eye health services for children in a low-resource setting. At the end of 2018, all 160000 school children in Trans Nzoia county had been screened and over 5000 children received treatment.

By shifting screening activities to non-specialists, Peek enabled increased capacity for ophthalmic nurses who formerly had to travel long distances from school to school to conduct screening. With Peek, those nurses could concentrate on treating children and following up those who did not attend appointments, ensuring no child was left behind.

A scientific trial\(^1\) of the programme showed that attendance at follow-up appointments more than doubled with Peek, compared to conventional programmes. By the time the entire county was complete, 81% of children screened were attending follow-up appointments, compared to 21% in a similar programme using conventional paper-based records.

NEXT STEPS

Since the pilot study in 2015, the school eye health programme developed in Trans Nzoia has been adapted for use in Botswana, India, Pakistan and Zimbabwe. It is now being rolled out in several new countries.

ABOUT PEEK

Peek Vision powers eye health organisations with technology-enabled tools and processes to improve how they deliver care. The result is better eye health for the millions of people worldwide who need it.

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