

## Insights

# Building Stronger Systems for Better Children's Vision Care

As part of the Improving Children's Vision: Systems, Stakeholders & Support ([ICV](#)) collaborative, the state team in Arizona found that many children were not only failing their vision screenings, but many were also lost to follow-up and not receiving necessary interventions early enough.

"This is a huge issue for us: kids failing a screening and then not getting connected for an eye exam and potential diagnosis and treatment," says Karen Woodhouse, state team leader for the project and Director of Eyes on Learning. "We can screen all the kids in the world, but if there's no follow-up to address the problem or condition, then we're not really making any impact at all."

Like groups from Ohio and Wyoming who are also participating in the ICV project, Woodhouse and her team are seeking to use quality improvement (QI) methods and tools to create systems-level changes and, in turn, boost detection and follow-up of vision problems in young children. The project is led by the National Center for Children's Vision and Eye Health at Prevent Blindness (NCCVEH) in partnership with NICHQ.

"Improving children's vision is very complex and responsibility making changes extends beyond the walls of any one organization, so exploring systems and working with partners across boundaries to align the work is incredibly important," says NICHQ Improvement Advisor Sue Butts-Dion.

As NCCVEH Director Kira Baldonado explains, the QI work is focused on creating a standardized approach to children's vision- from screening to eye examination with assured access to treatment and family support.

"Right now we have individual siloed programs that try to address children's vision, whether it's a school-based screening program or a community group or screenings that happen at pediatric primary care practices," she says. "They're all working in different ways with potentially different outcomes, which leads to a lot of confusion and duplication of services for the parents. That needs to change, so that we're making sure we get the necessary preventive services to the right populations."

Improving accountability and surveillance are central goals of this improvement project.

“When data comes out of a vision screening, it’s usually just held by that program rather than shared,” says Baldonado. “There’s no way to know if a child has previously been screened, or if there’s a medical history that might necessitate an eye exam referral. We need systems of accountability and surveillance in place to ensure that a vision issue is discovered and cared for early on, so that the child can go off to school with healthy vision.”

In one of the first phases of the ICV project, Arizona, Ohio and Wyoming reviewed their children’s vision health systems at the state level. Those assessments uncovered a number of barriers and challenges, such as poor data collection and lack of processes for tracking referrals through to an eye examination.

“When a child is referred to an ophthalmologist or optometrist because they failed a screening at their primary care office, there might not be any follow-up on that,” says Woodhouse. “It’s not because the doctors don’t care or don’t think it’s important—usually there are administrative aspects that are challenging, or there’s a lack of resources.” Adds Butts-Dion, Improvement Advisor, “This is a perfect example of the need to focus on systems when improving quality and not on people—challenging administrative processes or lack of resources versus challenging staff.”

On a patient level, a variety of social, economic and logistical factors may interfere with vision care. For instance, families might not be able to take time off work to go to a second appointment or have transportation to reach a provider. Even certain stigma may prevent follow-up: Some parents might be afraid of their children being bullied because of their glasses.

Lack of accessibility is another major barrier for many families. In Arizona, a familiar problem that arises throughout healthcare appears: Families who live in rural communities often live great distances from treatment centers. Some families live hours away from the nearest medical center, so returning a second time can feel daunting. As a solution, one pediatrician at an Arizona medical center recently identified an on-site eye-care clinic, then facilitated open appointments for children who had failed their vision screenings.

“That way, families can walk right over to the clinic for an exam instead of having to go home and come all the way back another time,” says Woodhouse. “We’re collecting data on this now, but it seems to be an intervention that could really improve outcomes for these kids.” “This intervention ties nicely to synchronizing steps in a process and minimizing hand-offs—two change concepts that are often used in quality improvement projects working to improve workflow,” says Butts-Dion.

As the ICV project moves forward, state teams are also zeroing in on such strategies as increasing screening availability among providers who typically work with children age five and under, making changes to data collection systems, expanding vision screening implementation and access to eye exams, and better educating parents about the importance of vision care.

“Improved messaging could be a huge gain for the project,” says Woodhouse. “We’re asking, ‘How can we make children’s eye health irresistible to families?’ We need to make it so compelling that they completely get it, understand exactly what they need to do and want to get their child the proper care.”

With state teams having customized their aim and goals and now testing changes using Plan-Do-Study-Act (PDSA) cycles, Baldonado stresses that strengthening vision care systems must take place with the focus on the ultimate customer--children. "We need to make sure everyone is working together to help the child, rather than focusing on individual programs," she says.

If a child undergoes a vision screening at a Head Start program, for example, the program could then provide screening results to the child's medical home. "From there the medical home engages the family and connects them to an eye care provider, who might report back to the Head Start and tell them, 'This child has a serious vision problem and needs this type of assistance in the educational setting,'" says Baldonado. "It's about creating alignment through the entire system, and putting all the different stakeholders in the right role so they can best support the child."