



Engaging Families, Ensuring Eye Care and Adherence to Treatment

An educational webinar presented by the *Year of Children's Vision* initiative



About the *Year of Children's Vision* initiative

- ∞ The goal of YOCV is to provide national guidance to staff of Head Start, Early Head Start and other early childhood programs to standardize approaches to vision screening, improve follow-up for eye care, provide family friendly educational information and consult with some of the nation's leading pediatric eye care providers to ensure best practices.
- ∞ YOCV was initiated by and is supported by leading national vision health organizations, for a complete list and other resources go to:
<http://nationalcenter.preventblindness.org/year-childrens-vision>



About today's presentation...

- ☞ The goal of today's webinar is to.....
 - Share key educational points for families; including frequently encountered vision problems for children and the impact on daily activities as well as development, and common treatment options.
 - Understand common barriers to eye care and arm families with resources, access to providers, preparing for the eye exam and needed treatment.
 - Evaluate the effectiveness of your vision health program.



Your presenters

- ✎ **Sandra S. Block, OD, MEd, FAAO, FCOVD**; Medical Director, School-based Vision Clinics; Illinois College of Optometry
- ✎ **Stacy Ayn Lyons, OD, FAAO**; Professor, Chair, Dept. Specialty and Advanced Care , New England College of Optometry
- ✎ **Kira Baldonado**; Director, National Center for Children's Vision and Eye Health at Prevent Blindness

Question moderator:

P. Kay Nottingham Chaplin, Ed D; Director – Vision and Eye Health Initiatives, Good-Lite





Sandra S. Block, O.D., M.Ed

Illinois College of Optometry

Common Vision Problems

What are the most common problems, how are they treated, and how will they impact what takes place in the classroom?

We Care About Vision in Preschool Children

- ☞ Vision disorders are the 4th most common disability in the US.
- ☞ Vision is the most prevalent handicapping condition in childhood.
- ☞ Early detection and treatment can improve the outcome for most vision problems



Most Common Problems Seen In Children

- ∞ Amblyopia or Lazy Eye
- ∞ Strabismus – Eye Turns
- ∞ Uncorrected Refractive Errors
 - Myopia – nearsightedness
 - Hyperopia – farsightedness
 - Astigmatism



Vision Problems in Children

Amblyopia

- ∞ Reduced visual acuity in an otherwise healthy eye
- ∞ Results from disuse of the eye due to an eye turn, high refractive error (one or both eyes), media opacity
- ∞ Prevalence varies from around 2-5%



Vision Problems in Children

Amblyopia

- ☞ Vision screenings identify whether a child is at risk.
- ☞ The eye doctor makes the diagnosis or identifies problems that may eventually lead to amblyopia.
- ☞ Treatment options for amblyopia vary significantly.



Amblyopia

- ⌘ Much research has been conducted over the past 10 years in the field and treatment has changed a great deal.
- ⌘ If the decreased vision is the result of a anatomical or pathological cause, the treatment may be surgery or other medical treatment. Ex: ptosis or cataract



- ⌘ The majority of amblyopia results from uncorrected or strabismus.



Amblyopia from Refractive Errors

- ✎ This can affect one or both eyes.
- ✎ The vision can be mild, moderate or severe.
- ✎ Children will typically not realize that they have a vision problem.



Amblyopia from Refractive Errors

- ∞ Treatment will vary depending on the cause and severity.
- ∞ The most common treatment for amblyopia is prescription glasses. Optical correction (glasses or contact lenses) alone treats the problem but is not always sufficient.
- ∞ Other treatments include patching (usually while wearing the glasses), atropine (putting drops in the better seeing eye) or eye exercises.
- ∞ If patching is a part of the treatment - current research suggests 2- 6 hours depending on the severity. Patching is most effective if the child is using the lazy eye while patching.



Amblyopia from Refractive Errors

- ☞ Challenges include ensuring the child follows the eye doctors recommendations.
- ☞ It is natural for children to not understand the need for the glasses when they see well out of one eye without glasses.
- ☞ It is common for children who are being patched to try to peek out from under the patch because they can see so much better with their other eye.
- ☞ If patching is taking place while the child is at the Head Start program, a watchful eye from the adults will be very important to successful treatment.



Vision Problems in Children

Strabismus

- ∞ The two eyes are not aligned. One eye turns in, out, up or down in relation to the other eye.
- ∞ Prevalence 1-5% in children without complications.
- ∞ Varies up to 53% in high risk children.
- ∞ When we refer to high risk – we refer to neurodevelopmental problems, complicated prenatal or birth history, or children who have experienced trauma.



Types of Strabismus



Esotropia

Exotropia



Strabismus

Strabismus can present in many ways:.

- ☞ The eye turn can be in, out, up or down.
- ☞ The turn can alternate from one eye to the other.
- ☞ The eye turn can be present all time or only sometimes.
- ☞ Strabismus that typically only affects one eye often leads to amblyopia as well.
- ☞ The treatment for strabismus is dependent on the above factors.
- ☞ Options include optical correction, patching, surgery or sometimes just watching.



Vision Problems in Children

Significant Refractive Errors

- ☞ Refractive errors include myopia, hyperopia, or astigmatism.
- ☞ Usually both eyes have similar problems but not always.
- ☞ Most refractive vision problem in childhood can be corrected with glasses or contact lenses, however, prescriptions are not always given.
- ☞ The eyes of young children are still growing and developing.
- ☞ There are times when it is better for a child to delay being corrected to allow for normal development.

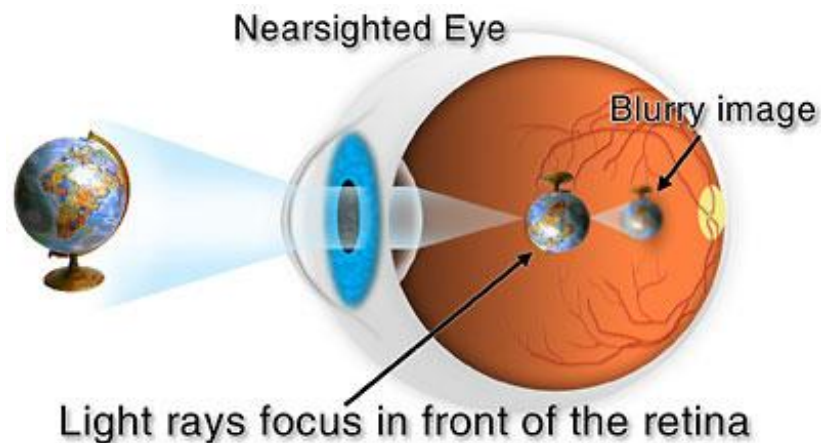


Refractive Errors

There are three primary types of refractive errors:

∞ Myopia or nearsightedness

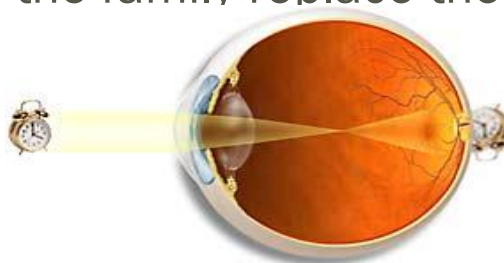
- Distance or far vision is reduced
- Near vision is fine unless there is a great deal of myopia
- Prescribing for myopia is dependent on the amount as well as the age of the child. Sometimes it is better to watch.
- Children will often sit close to the television and bring books close to the eyes.



Refractive Errors

∞ Hyperopia, hyperemetropia or farsightedness

- Distance vision is typically not affected in mild and moderate amounts in children but is in high amounts
- Near vision is compromised more than far vision.
- Children with uncorrected farsightedness often resist doing close work because they have to work so hard in order to see clearly
- Significant amounts of farsightedness can lead to strabismus. For these children you will often see an immediate change in the posture of their eyes when they wear their glasses. These children should be encouraged to use them properly. If they break, it is important to have the family replace them as quickly as possible.



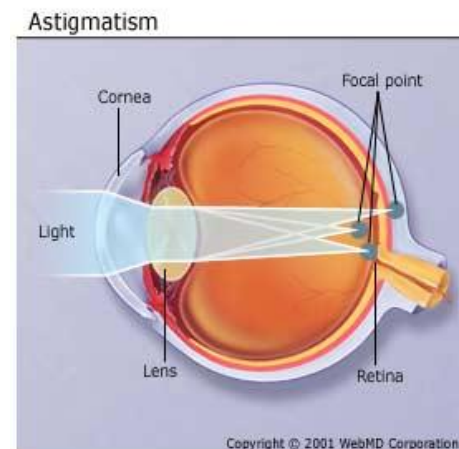
Farsighted Eye



Refractive Errors

∞ Astigmatism

- Astigmatism affects far and near vision equally
- Astigmatism is often seen with myopia or hyperopia
- Children often squint to see clearly
- In certain groups, large amounts of astigmatism are more common. These include certain subgroups of American Indians and individuals of Hispanic descent.
- When astigmatism is present in large amounts, it can lead to amblyopia if left uncorrected.
- Children need to wear their glasses all the time when significant astigmatism is present.



Uncommon Vision Problems in Children

- ☞ Cataracts
- ☞ Color Vision Problems
- ☞ “Pink eye” or conjunctivitis
- ☞ Eye movement problems
- ☞ Eye health problems – retina, cornea, optic nerve





Stacy Ayn Lyons, OD

New England College of Optometry

Finding Solutions To Improving Access To Eye Care

Vision Screening

- ☞ Identifies children at risk for vision problems or who require a comprehensive eye exam due to performance on screening tests
- ☞ Designed to detect disorders in early, treatable stages



Vision Disorders in Preschoolers

- ∞ Fourth most common disability in the U.S.
- ∞ Most prevalent handicapping condition of childhood.
- ∞ However...
- ∞ Children do not know how they should see
- ∞ Are unable to tell us that they cannot see
- ∞ Vision problems do not hurt.

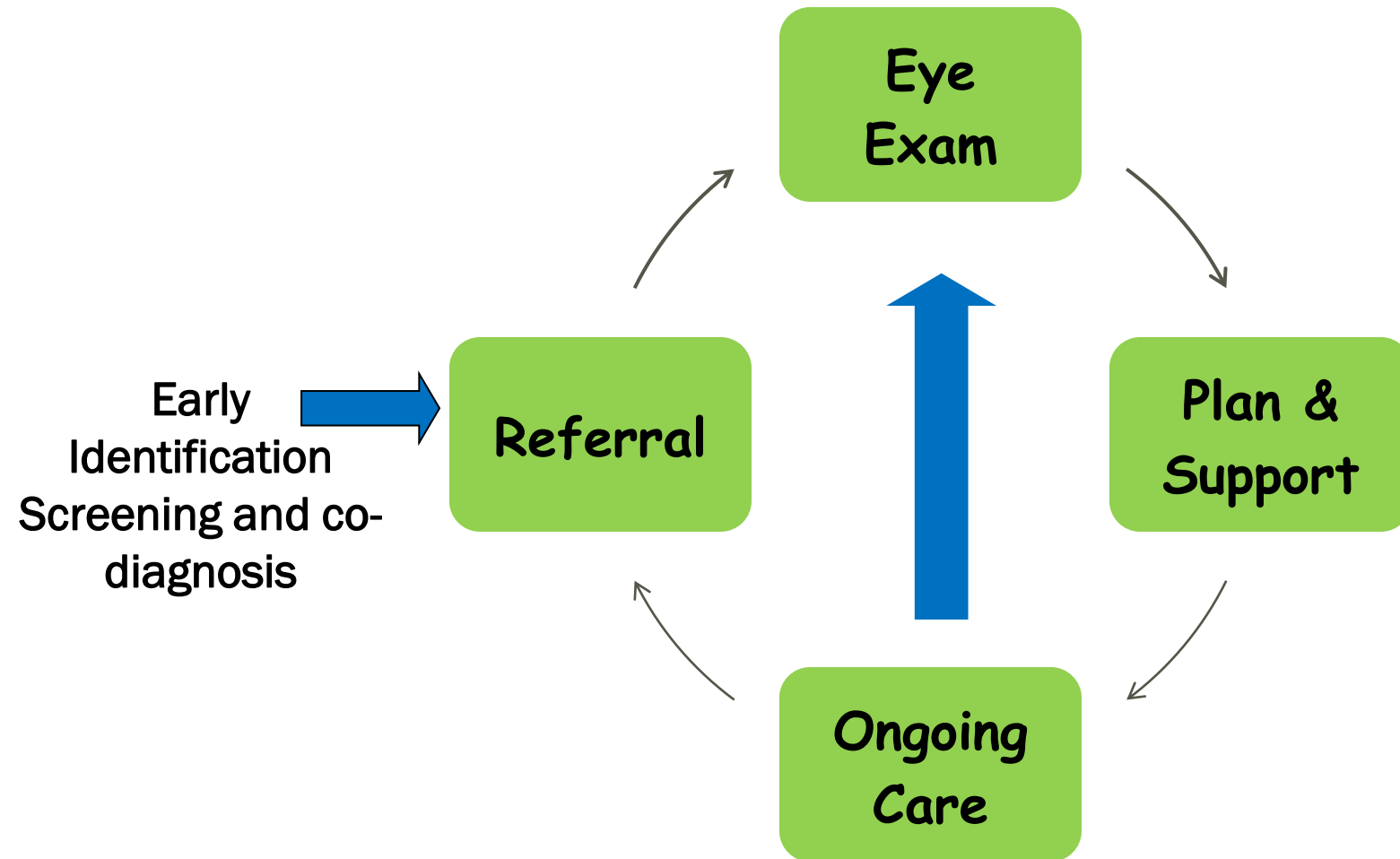


BOOKS

PLAY



Vision Care Continuum



Comprehensive Eye Examination

- ⌘ An eye exam, performed by an optometrist or ophthalmologist, diagnoses eye disorders and diseases and prescribes treatment.
- ⌘ Includes an evaluation of the refractive state, ocular health evaluation, visual acuity, ocular alignment, binocularity, and color vision testing

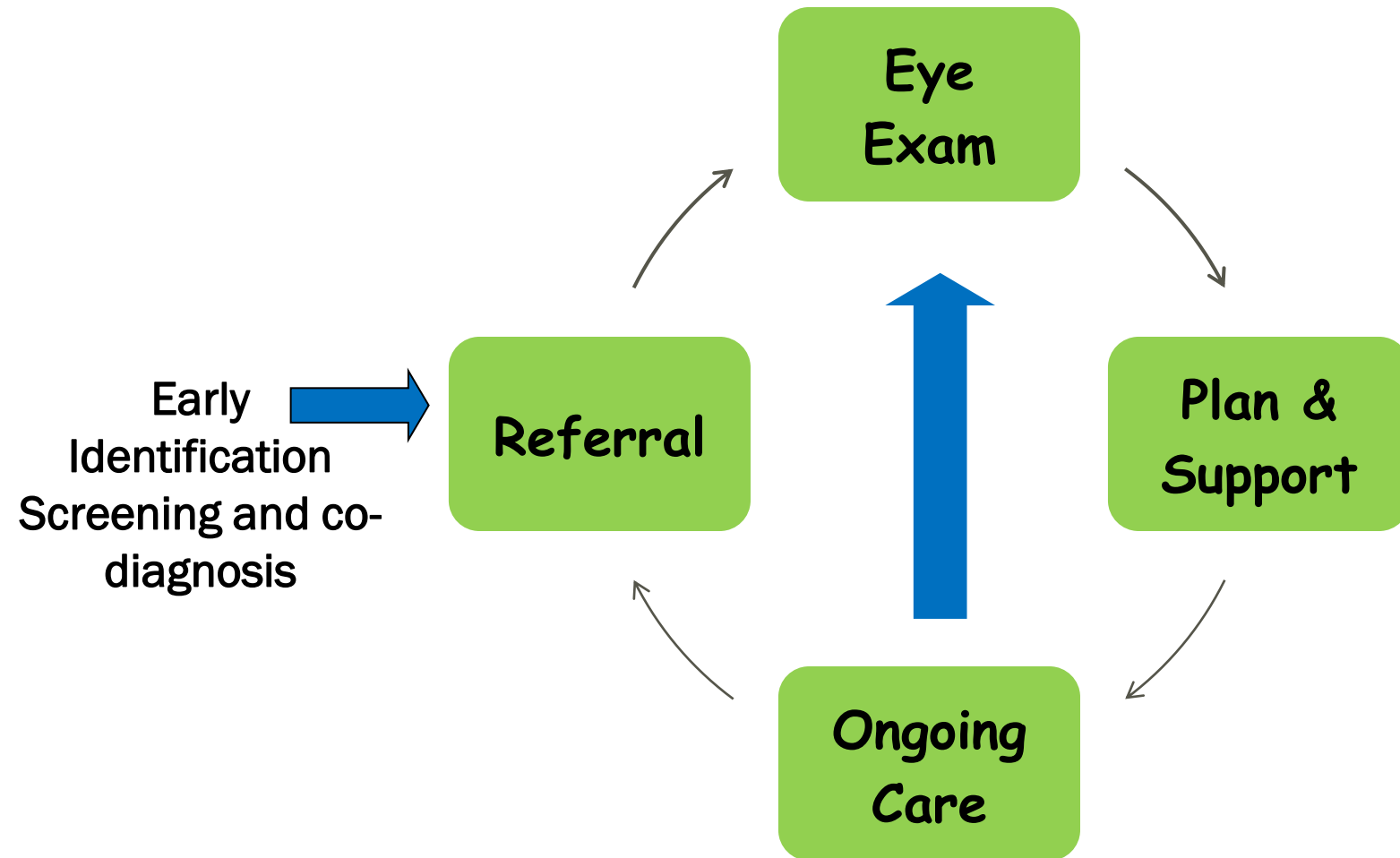


A Child Should Have A Comprehensive Eye Exam if:

- ✎ They have failed a vision screening (at the pediatrician or school)
- ✎ They display any signs of vision problems
- ✎ There are concerns about reaching developmental milestones
- ✎ There are concerns about reading, learning or performance at school



Vision Care Continuum



Reasons Follow-up Eye Exams Do Not Occur: Research Studies

- ∞ National average for turn around time between a failed vision screening and access to comprehensive eye care is 18 months.
- ∞ National data which indicates that 40-65% of children do not access follow-up comprehensive vision care after school vision screening referral.
 - Gap for children of ethnic minorities



Barriers to Care and Treatment

∞ Knowledge

- Screening vs comprehensive exam
- Potential impact of vision problems with learning
- Awareness of resources
- Lack of knowledge of where to go for the exam
- Difficulty navigating the health care system

∞ Cost

∞ Time, transportation

∞ Language, culture

∞ Trust



Increasing Compliance With Follow-Up Exams

Provide Easy-To-Read materials:

- Use plain, non-medical language

- Limit the amount of information provided

- Write at or below the 6th grade level

- Use large font and plain text style



Increasing Compliance With Follow-Up Exams

∞ Provide Needed Information

- Explain vision screening process and part their child did not pass
- Explain implications of vision problems (parents, guardians, teachers, social workers, health managers)
- Provide lists of area service providers
- Provided financial assistance information
- Provide transportation assistance information



Increasing Compliance With Follow-Up Exams

- ∞ Increasing Compliance With Community Providers:
 - Become familiar with community resources
 - Build partnerships with providers
 - Explore creative options for service delivery



On-Sight Mobile Clinic

- ∞ Access for all children
- ∞ Comprehensive Visual Examinations
- ∞ Eyeglasses



Eyes that Thrive

- Develop and implement a community program to support school-based care of prescribed treatment plans for children with vision conditions
- 2011 Healthy Eyes Healthy People® State Association Grants (Massachusetts)





Eyes that Thrive

1. Vision Action Plan
2. Two Pair of Glasses
3. Individual Education Card
4. Education for Head Start health managers, staff and families
5. Consultation available to Head Start health managers, staff and families
6. Compliance Tracker for evaluation



Eyes that Thrive




HYPEROPIA



_____ 's eyes

date of birth / /	name of school	date of eye exam / /
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- Your child has trouble seeing pictures in a book, small toys, games on the computer, and seeing clearly for as long as other children can.
- To help your child see clearly, it is important that your child wear eye glasses all of the time that he or she is awake.
- Follow-up visits with the eye doctor are very important for your child.

The vision condition that your child has is 'hyperopia'.




HYPEROPIA



_____ 's eyes

date of birth / /	name of school	date of eye exam / /
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- Your child has trouble seeing pictures in a book, small toys, games on the computer, and seeing clearly for as long as other children can.
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The vision condition that your child has is 'hyperopia'.



Vision Action Plan

This Vision Action Plan is valid from _____ to _____. -OR-

Initial treatment plan only. A follow-up eye exam is needed in _____ (month/year) to complete this Vision Action Plan.

Student Name: _____ Date of Birth: _____

Parent/Guardian Name: _____

Preferred Phone: _____ Alternate Phone: _____

School: _____ Health manager/school nurse: _____

Date of eye exam: _____

Eye doctor (Name/Practice): _____

Office or store where eye glasses were obtained: _____

CURRENT DIAGNOSIS: _____

CURRENT TREATMENT PLAN:

Eye glasses should be worn:

All of the time when awake

Only when the child needs to see small things that are far away

Only when the child needs to see small things that are within arm's length

An eye patch should be worn:

To cover right eye To cover left eye

Total of ___ hours per day (___ hours at home, ___ hours at school)

*If the child has eye glasses, the child should wear their eye glasses when they wear the patch.

Eye drops will be used instead of a patch and will be given by the parent at home. These eye drops will cause the pupil to get larger and the vision to blur in the better-seeing eye.

ADDITIONAL NOTES AND/OR RECOMMENDATIONS: _____

Parent/Guardian Signature: _____ Date: _____

Doctor Signature: _____ Date: _____

Health Manager/School Nurse Signature: _____ Date: _____



Impact

∞ Impact of integrated vision health interventions on follow-up care for children who failed vision screening in head start programs in Boston, MA

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Impact

Aim

- ☞ To evaluate the impact of integrated vision health interventions on follow-up care for children who failed Head Start vision screening.

Methods

- ☞ A cross sectional study of data from two school years (2007-2008 and 2011-2012) was used to evaluate follow-up for children who failed vision screening.



Impact/Results

- ☞ All children enrolled in Head Start had a vision screening within 45 days of entry.
- ☞ In 2007-2008, 572 children failed screening and were referred for follow-up care; 14% received timely eye examinations.
- ☞ In 2011-2012, 419 children failed vision screening; all children received timely eye examinations and treatment.



Conclusion

- ∞ Increased access to eye examinations/treatment
- ∞ Increased parent and staff awareness of pediatric vision issues
- ∞ Community based solutions have resulted in timely follow-up care for all referred children.



Thank You



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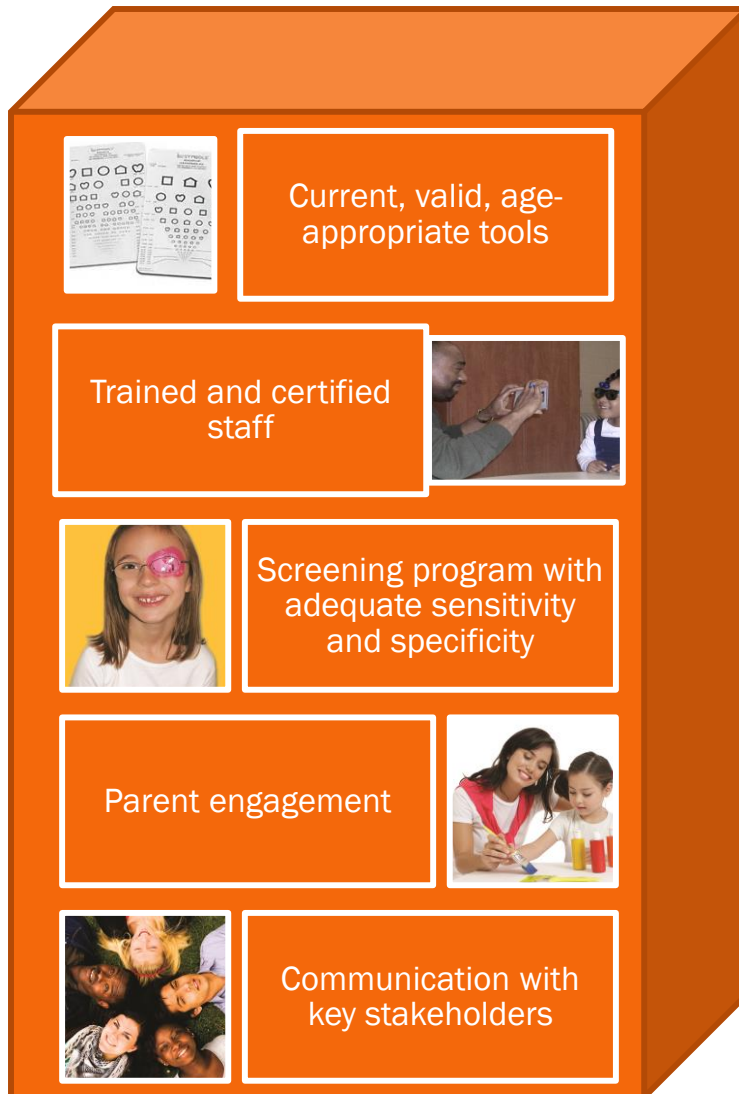
Kira Baldonado

National Center for Children's Vision and Eye Health at Prevent Blindness

Evaluating Your Vision Health Program

Ensuring effectiveness, engagement, and healthy outcomes

Why is evaluation important?



The foundation for children's vision health goes beyond completion of a vision screening!



Key points of evaluation

#1: Compare screening results to eye exam outcomes to identify variations or needed revision in screening procedures.

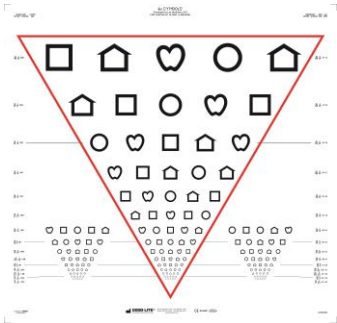
- Do you have a high rate of referrals that result in eye examinations without diagnosis of a problem?
- Strive for a high rate of **specificity** and **sensitivity**
- Discuss your procedures with a local optometrist, ophthalmologist, or Prevent Blindness affiliate



Key points of evaluation

#2: Review all vision screening tools annually to ensure they are in good working order and any software or settings are updated before using them to screen vision of children.

- Are tests of recognition visual acuity clean and in good condition?
- Are vision screening stations set-up in areas that are well lit, free of distraction, and at age-appropriate distances?
- Are your vision screening instruments utilizing current software? Do they need to be updated or calibrated?
- Are you using the most up-to-date referral criteria for the age group being screened?



Are all screening accessories in good working order? (such as batteries, occluders, etc.)



Key points of evaluation

#3: Ensure that the certifications for all trained vision screeners (staff or contracted agency) are current.

- Trained and certified by a nationally recognized organization and/or a state agency (Dept. of Public Health)
- Recertify every 3-5 years
- Training included (at a minimum) an overview of children's vision problems, age and developmentally appropriate screening/assessment techniques, a follow-up component, and a parent education component.
- Training and certification is included in professional development plans.



Key points of evaluation

#4: Review your vision health program results annually with your parent and health advisory committees to identify needs and seek solutions for possible barriers to follow-up care.

- Equipment and screener certifications
- Screening and referral rates
- Rate of follow-up to care
- Identify common barriers to eye care and seek solutions
- Review all referral and educational materials for cultural competency and literacy levels



Key points of evaluation

#5: Report end-of-year data to health, education, and community stakeholders.

- Key stakeholders include: state Head Start association, community screening programs, state child care resource and referral association, primary care providers, eye care providers, public health programs
- Share common barriers to eye care and seek solutions jointly
- Ensure best use of available community resources
- Identify underserved populations



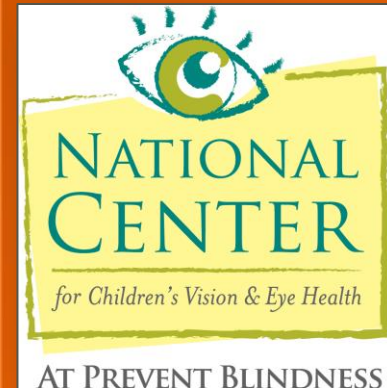
THANK YOU!

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Questions for the presenters?

Conclusion of today's presentation

- ☞ Thank you to each of our presenters
- ☞ Today's webinar will be archived and available online, link will be sent via email
- ☞ Be on the lookout for more *Year of Children's Vision* events
 - YOCV website: <http://nationalcenter.preventblindness.org/year-childrens-vision>

Thank you for attending!

