

Building a Strong Vision Health System of Care: Components and Resources

An educational presentation from 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-childrensvision

About today's presentation...

- The goal of today's presentation is to help program staff develop and implement a strong, 12-component Vision Health System of Care, even when vision screening is conducted by volunteers or outside agencies. This system of care includes critical questions to answer about vision development and ways parents can be engaged in follow-up care.
- After this session you will be able to:
 - 1. Describe the 12 components that support a strong Vision Health System of Care
 - 2. Describe 3 critical components to monitor when outside volunteers screen vision of your children
 - 3. Describe 3 critical components of your vision health program to measure annually
 - 4. Describe 3 vision resources available from the Year of Children's Vision and the National Center for Children's Vision and Eye Health at Prevent Blindness



At the end of the day...



Join us here at 4 pm for roundtable discussions with the presenters.

Your presenters

P. Kay Nottingham Chaplin, Ed.D

- Director Vision and Eye Health Initiatives for The Good-Lite Company and School Health Corporation
- Member National Advisory
 Committee and Education
 Subcommittee to the National
 Center for Children's Vision and
 Eye Health at Prevent Blindness

Kira Baldonado, BA

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







Presenter Disclaimer

- P. Kay Nottingham Chaplin, Ed.D
- Employed by Good-Lite
- Consultant to School Health Corporation

Kira Baldonado, BA

This presenter has no conflicts of interest to declare. The opinions expressed in this presentation are solely those of the presenter.

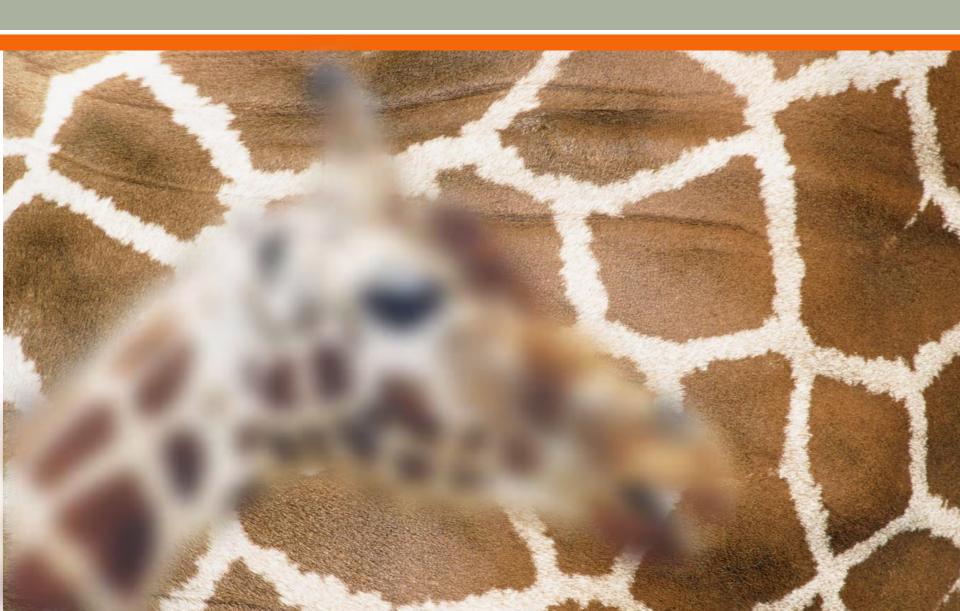


Madison's Giraffes





Madison's Giraffes



Key Considerations "What makes a great vision health program for children like Madison?"

- 1. Support Your Families
- Employ an evidence-based approach to vision screening
- Ensure effective communication among all stakeholders
- 4. Assess your competency- are you making a difference?

Each "key consideration" includes multiple components that should be attended to.



Key Considerations:

1. Components of a Strong Vision Health System that Support Madison's Family

Ensure that all parents/caregivers receive educational material, which respects cultural and literacy needs

- We have vision health information in all **native languages** of the families that we serve.
- We discuss the importance of healthy vision as a part of proper child development in the general health information provided by our program.
- We provide parents with easy-to-understand* information on the visual milestones for children at all stages of life.
- Our parent/and or health advisory committee(s) have reviewed our vision health information for, content, clarity of instruction, cultural literacy, and reading level.
- We provide health information to parents of **children with special healthcare needs** that describe their increased risk for vision problems.
- We have active **Parent and Health** Advisory Committees



Ensure that parent/caregiver's written approval for vision screening includes permission to...

- Share screening results with the child's eye care provider and primary care provider.
- Receive eye exam results for our program's records.
- Talk with the child's eye care provider for clarification of eye exam results and prescribed treatments.
- Share eye exam results with the child's primary care provider.

Be aware of state specific laws around health information.



Provide parents/caregivers with vision screening results in easy-to-understand language

- Vision screening results are provided in both a written and verbal format to parents/caregivers.
- We provide vision screening referral information and follow up to care information in the family's **native language**.
- Our vision screening referral information is written at a 4th to 6th grade reading level.
- The follow-up actions for families are clearly described and parents are advised to act within a specified timeframe.



Link parents/caregivers to an eye examination

- We have an updated **list of area eye care providers** who serve children.
- We provide access to programs for free or low cost vision services.
- We create opportunities for local eye care providers to speak with all families we serve.
- We facilitate families' access to health insurance coverage for which their child may qualify.
- We have an eye care professional with vision screening experience on our Health Advisory Committee.

Resources to Support Madison's Family

Financial Assistance Information

Association of Schools and Colleges of Optometry

6110 Executive Boulevard, Suite 510 Rockville, Maryland 20852 Phone: (301) 231-5944 Fax: (301) 770-1828 www.opted.org

Many optometry schools offer lowcost care to people willing to be treated by supervised students. They may also provide free care to people who join research studies.

Chronic Disease Fund

6900 N. Dallas Parkway, Suite 200 Plano, TX 75024 Toll-free Patient Info: (877) 968-7233 Main: (972) 608-7141

Chronic Disease Fund* is an independent 501 (c/g) non-profit charitable organization helping patients with chronic disease, cancers or life-akering conditions obtain the expensive medications they need.

Fax: (415) 561-8567 www.eyecareamerica.org

EyeCare America provides eye care to US citizens and legal residents through volunteer ophthalmologists (Eye MD.s) at no cost to those who qualify. Go to the website or call to find out if you qualify for eye care. EyeCare America facilitates eye care for U.S. citizens or legal residents who are without an Eye M.D. and who do not belong to an HMO or do not have eye care coverage through the Veterans Administration.

• Those who are age 65 or older and who have not seen an EyeMD in three or more years may be eligible to receive a comprehensive, medical eye exam and up to one year of care at no out-of-pocket cost for any disease diagnosed during the initial exam. Volunteer ophthalmologists will wave co-payments, accepting Medicare and for other insurance reteibulusement as payment in full: patients without in surance receive this care at no charge.

211 West Wacker Drive Suite 1700 Chicago, Illinois 606a 800.331 2020 PreventBlindness.org

Prevent Blindness



whether the Document Comment C



Parent Education

Financial Assistance Programs

http://nationalcenter.preventblindness.org/resources-2





Audience Engagement: At what point in your program do you educate parents about their child's vision health?

Key Considerations:

2. Employ an evidence-based approach to vision screening

Vision screening

- Make the two types of vision screening:
 - Optotype-based
 - Instrument-based
 - Or combination
- Optotype = name of shape, letter, or number to identify
- Optotype-based screening measures visual acuity
- Instrument-based screening measures for presence of amblyopia risk factors:
 - Significant refractive error
 - Asymmetry of refractive error
 - Misalignment of eyes
 - Presence of cataract





Screen vision with age-appropriate and evidence-based tools and procedures, including optotypes (pictures) and/or instruments

- If we use devices for instrument-based screening, the devices include software upgrades recommended by the National Center for Children's Vision and Eye Health at Prevent Blindness.
- If we use devices, the referral criteria is set according to recommendations from the National Center for Children's Vision and Eye Health at Prevent Blindness or our local eye care providers.



- ✓ Welch Allyn SureSight
 - ✓ Calibrated every 18 months
 - ✓ Set in child mode
 - ✓ Set in "minus" calibration until you can upgrade to recent software
 - ✓ Upgrade software to Version 2.25



- ✓ Updated with most recent software
- ✓ Discuss referral criteria with local eye care professional
- ✓ Plusoptix S09, S12R, or S12C
 - ✓ Updated with most recent software
 - ✓ Discuss referral criteria with local eye care professional







Have an age-appropriate and evidence-based test of visual acuity as a backup to instrument-based vision screening

- If we use devices, we have an age-appropriate and evidence-based test of visual acuity as a backup if:
 - The device malfunctions,
 - We forgot to charge the batteries, or
 - We cannot achieve a reading.

- Head Start children in Vision in Preschoolers Study
 - Could "nearly always"
 participate in instrument based screening if unable
 to participate in optotype based screening, and vice
 versa

Vision in Preschoolers Study Group. (2007). Children unable to perform screening tests in Vision in Preschoolers Study: Proportion with ocular conditions and impact on measure of test accuracy. *Investigative Ophthalmology & Visual Science, 48*(1), 83-87. Retrieved from http://www.iovs.org/content/48/1/83.full.pdf+html



Screen vision with age-appropriate and evidence-based tools and procedures, including optotypes (pictures) and/or instruments

- If we do optotype-based vision screening as a backup to instrument-based screening, we use an "eye chart" that meets national/international design guidelines for standardized eye charts, an approved optotype booklet, or a single, surrounded LEA Symbols booklet or system.
- If we use an "eye chart" as a test of visual acuity for optotype-based screening, the eye chart meets national/international design guidelines for standardized eye charts.





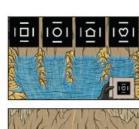
Single, Surrounded LEA Symbol

Research supports using single, LEA Symbols optotypes surrounded with bars at 5 feet for children aged 3 to 5 years











Vision in Preschoolers (VIP) Study Group. (2009). Findings from the Vision in Preschoolers (VIP) Study. *Optometry and Vision Science*, 86(6), 619-623.



Optotypes approximately equal in legibility

Horizontal between-optotype spacing = 1 optotype width

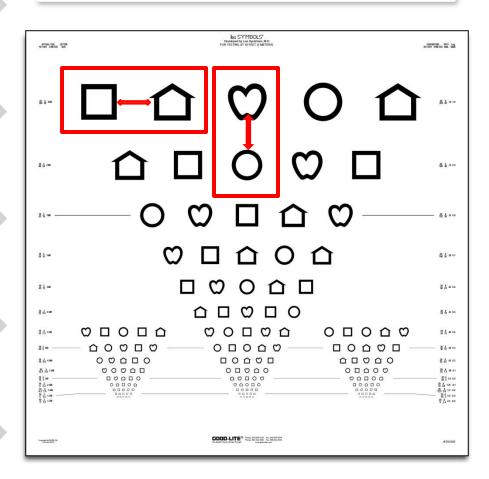
Vertical between-line spacing = height of next line down

Geometric progression of optotype sizes of 0.1 log units (logMAR, ETDRS)

5 optotypes per line

Optotypes black on white background with luminance between 80 cd/m² and 160 cd/m²

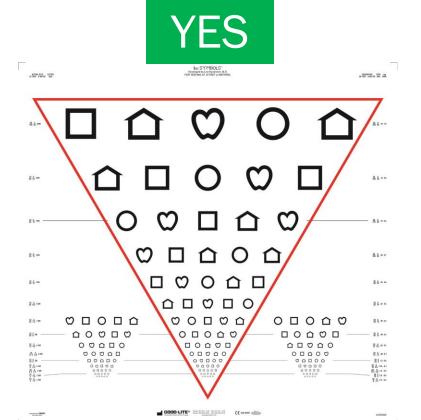
Similar recommendations across guidelines

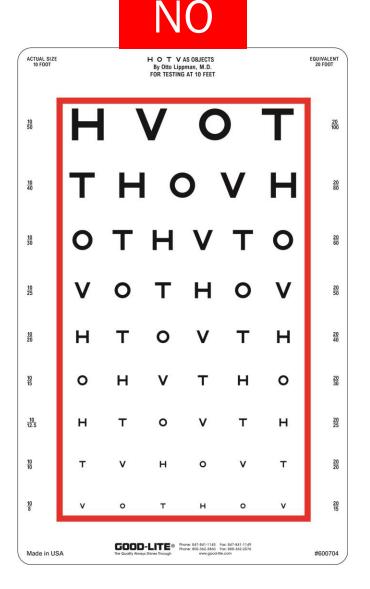


Design guidelines = "ETDRS Design"

Tips:

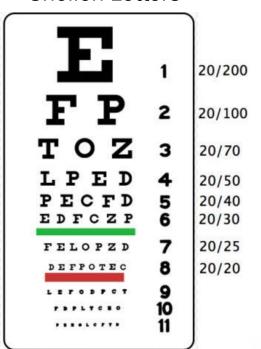
- Line outside optotypes = inverted pyramid, NOT rectangle
- 20/32 vs. 20/30
- 10 feet vs. 20 feet





Ok or not OK?

Snellen Letters



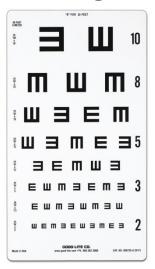
Allen Pictures

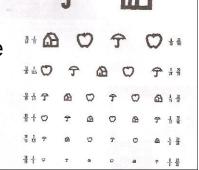




Lighthouse or "House, Apple, Umbrella"

Tumbling E







Screen vision with age-appropriate and evidence-based tools and procedures, including optotypes (pictures) and/or instruments

We use appropriate occluders when screening the vision of our children with tests of visual acuity.











Ok or not OK?





Screen vision with age-appropriate and evidence-based tools and procedures, including optotypes (pictures) and/or instruments

- If an outside person or agency screens the vision of our children, we have a process to review tools used.
- Me follow national guidelines for when to refer children.





Follow national referral and rescreening guidelines

- Example: 2003 Policy Statement from:
 - American Academy of Pediatrics
 - American Association of Certified Orthoptists
 - American Association for Pediatric Ophthalmology and Strabismus
 - American Academy of Ophthalmology

- Ages 3-5 years:
 - Majority of optotypes (3 of 5) on 20/40 line with both eyes
- Ages 6 years and older
 - Majority of optotypes (3 of 5) on 20/30 (20/32) line with both eyes

Eye examination in infants, children, and young adults by pediatricians. (2003). *Pediatrics*, 111(4), 902-907.



Rescreen or refer difficult-to-screen (untestable) children

- Me follow national guidelines for when to rescreen children.
- If a child will not participate in screening, we make another attempt as soon as possible, but within 6 months.
- If we are unsuccessful with the first attempt at screening, we rescreen the child immediately using a different vision screening tool (test of visual acuity or an instrument) within 6 months.
- If a child is untestable on the 2nd attempt, we refer the child for an eye exam performed by an optometrist or an ophthalmologist skilled in treating young children.



Do not "wait until next year" to rescreen

- 2x as likely to have vision problems than those who passed vision screening.
- If you have reason to believe that the child may perform better on another day, consider rescreening the child within 6 months.
- otherwise, refer untestable children for an eye exam with pediatric eye care professional skilled in treating young children.

Vision in Preschoolers Study Group. (2007). Children unable to perform screening tests in Vision in Preschoolers Study: Proportion with ocular conditions and impact on measure of test accuracy. *Investigative Ophthalmology & Visual Science*, 48(1), 83-87.

American Academy of Ophthalmology Pediatric Ophthalmology/Strabismus Panel. (2012). Preferred Practice Pattern® Guidelines. Amblyopia. San Francisco, CA: American Academy of Ophthalmology. Retrieved from http://one.aao.org/preferred-practice-pattern/amblyopia-ppp--september-2012



Include vision screening training for your staff that leads to state and/or national certification in evidence-based screening procedures

- We follow the National Center for Children's Vision at Eye Health at Prevent Blindness's vision screening training program, we receive face-to-face training from our local Prevent Blindness affiliate program, or we participate in a state-approved training program.
- We ensure new staff members are formally trained within 3 months of employment through the National Center for Children's Vision and Eye Health at Prevent Blindness, our Prevent Blindness affiliate program, or a state-approved training program.
- We "refresh" training every 3 to 5 years through the National Center for Children's Vision and Eye Health at Prevent Blindness, our local Prevent Blindness affiliate, or a state-approved training program.



Establish and follow policies for screening or direct referral to an eye care provider for children with special needs

- We use guidelines from the National Center for Children's Vision and Eye Health at Prevent Blindness for when to bypass vision screening and move directly to eye exam.
- We have a process to indicate in a child's files that the child met national guidelines to bypass vision screening and move directly to eye exam.
- We have a professional relationship with a Teacher of the Visually Impaired (TVI) from the local school system to answer questions about how to support the visual health of our children with special healthcare needs.

Resources to Ensure Proper Screening for Madison

Children's vision screening training and certification

Prevent Blindness America has the only national program for training and cei screeners.

Our children's vision screening training and certification program ensures consistent, highly effective s Blindness' professional advisors recommend screening tests designed to accurately detect children's v and certification program prepares screeners to do the best possible job.

Why is vision screening for children so important? >

What tests are included in the children's vision screening?

What's involved in the training?

Join Prevent Blindness America's 35,000 volunteers. Become a vision screener! ▼

Request information about vision screening training and certification or call § 1-800-331-2020.

Prevent Blindness Certified Screener

Chart Design Recommendations From:

American National Standards Institute, Inc. (ANSI Z90.21-1992 (R2004)-approved May 2010

World Health Organization (WHO) - 2003

International Council of Ophthalmology (ICO) - 1984 National Academy of Sciences - National Research Council

- 1. Optotypes of almost equal legibility (one optotype should not be easier to identify than another on the same line).
- 2. Same number of optotypes per line (5 per WHO, 10 per NAS-NRC, at least 5 per ICO [some charts may have 4 on top line to accommodate chart size]).
- 3. Spacing between optotypes width of optotypes on that
- 4. Spacing between rows height of optotypes on next line
- 5. Geometric progression of optotype sizes of 0.1 log units.
- 6. Black optotypes on white background.







No - "Snellen" Chart



Yes - LEA Symbols



Yes - Sloan Letters

P. Kay Nottingham Chaplin, Ed.D. - 304-906-2204; 304-376-9988 - kay@good-lite.com Good-Lite (847-841-1145 - www.good-lite.com) School Health (866-323-5465 - www.schoolhealth.com)

"A screening test's accuracy in separating children with normal vision and children who require further vision care requires knowing the test's sensitivity and specificity for detecting targeted vision disorders. Vision in Preschoolers Study, Optom Vis Sci. 2010;87:87-95.

Sensitivity and specificity into unknown for "saliboat charf".

www.good-lite.com

1.800.362.3860 1.898.362.2576 Fax



Audience engagement: How do you train in vision screening practices?

Key Considerations:

3. Ensure effective communication among all stakeholders

Obtain eye exam results for your files

- We use a reminder system to monitor child files to determine whether we received eye exam results from the eye care provider.
 - We use the reminder system to contact the eye care provider if eye exam results are not received within 1 month of the eye exam.
- If eye exam results are not received within 1 month of the eye exam, we have a process to systematically request eye exam results.
 - If eye exam results are not received after 3 systematic contacts, we stop the process and indicate in child files that eye exam results could not be obtained.





Obtain eye exam results for your files

If we see a pattern of challenges receiving eye exam results from specific eye care providers, we contact the eye care provider to brainstorm ways to make it easier to receive eye exam results.

We can report outcome data on completed referrals.





Send a copy of eye exam results to the child's primary care provider

- We have a system in place to send (mail, fax, e-mail) a copy of eye exam results to children's primary care providers.
- We indicate in child files the date eye exam results went to children's primary care providers.
- We indicate in child's file if we cannot obtain a copy of eye exam results to send to child's primary care provider.



Ensure that the eye doctor's treatment plan is followed

- We contact a child's eye care provider if we do not understand the eye exam results or treatment plan.
- We review vision treatment plans quarterly to help ensure parents schedule and attend upcoming eye care provider follow-up visits.
- We have a process for contacting the parent if a child does not wear prescribed glasses or a patch.
- We have a process for alerting a child's eye care provider if the child does not wear prescribed glasses or a patch.



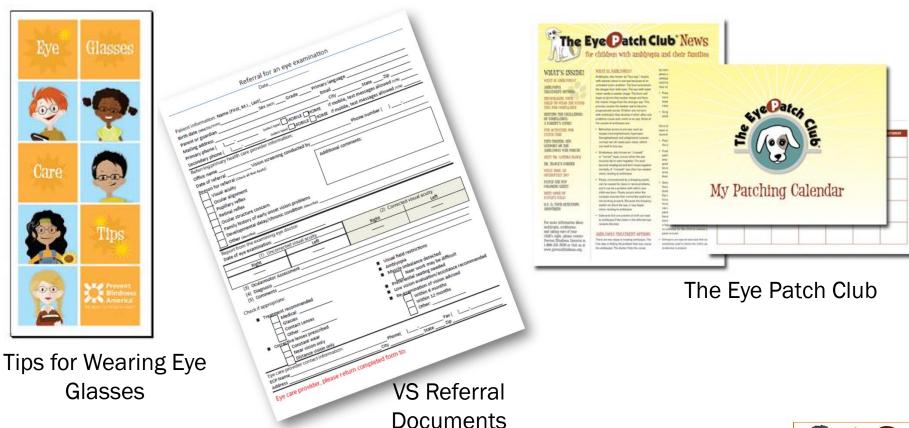


Ensure that the eye doctor's treatment plan is followed

- We have resources to share with parents if their children refuse to wear prescribed glasses.
- We conduct a sensitive child- and family-centered assessment to identify barriers to following the prescribed vision treatment plan.



Resources to Ensure Communication Among Madison's Stakeholders



http://nationalcenter.preventblindness.org/resources-2





Audience engagement: How engaged are you in a child's vision treatment plan?

Key Considerations:

4. Assess your competency- are you making a difference?

Create and implement a system for following-up with parents/caregivers to help ensure that the eye exam occurs.

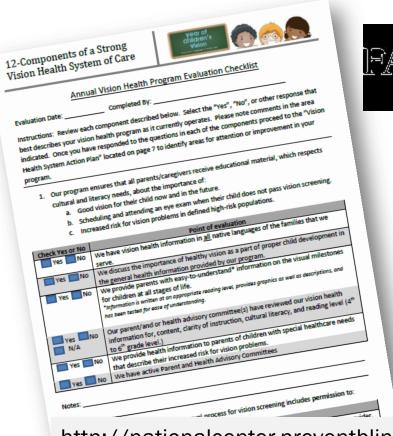
- We conduct follow-up calls to families within a set time* after a vision screening referral.
- We provide **electronic reminders** (text or email).
- We **require** a copy of a report from a primary care or eye care provider.
- We provide vision accommodations for children with a diagnosed vision problem.
- We provide a parent peer-to-peer health support program to families.
- We have **treatment plans** for vision in place for children who have been prescribed care by an eye care provider.

Evaluate the effectiveness of your vision health program annually

- We compare screening results to eye exam outcomes.
- We ensure that the certifications for all trained vision screeners **are current**.
- We review all vision screening tools annually to ensure they are in good working order and updated.
- We review our vision health program results annually with our parent and health advisory committees.
- We report our end-of-year data to health, education, and community stakeholders.



Resources to Ensure Competency





www.familyvoices.org

National Center for Family Professional Partnerships

http://www.fv-ncfpp.org/

National Center for Medical Home Implementation

http://www.medicalhomeinfo.org/

http://nationalcenter.preventblindness.org/resources-2

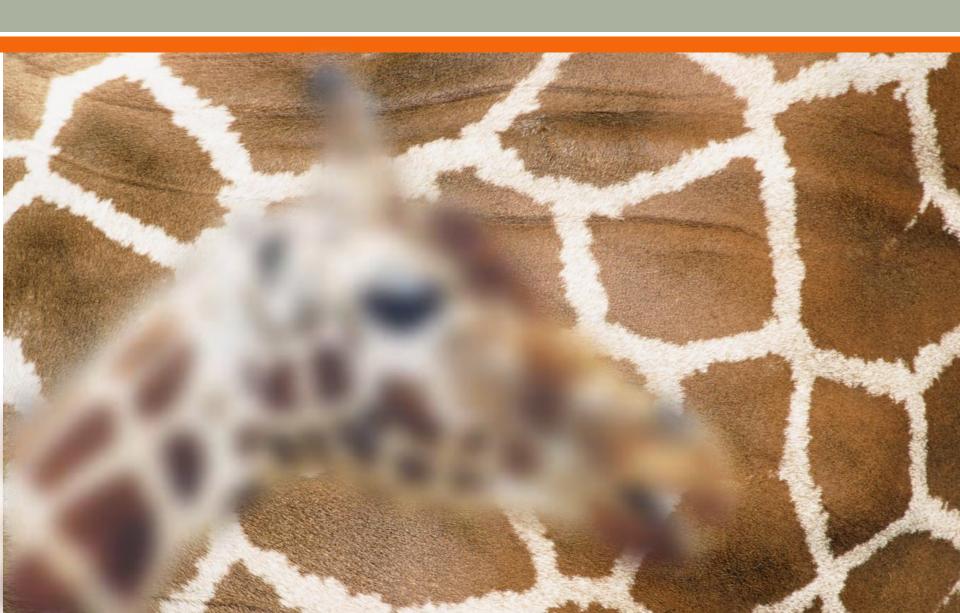






Audience engagement: How do you improve parent engagement in follow-up care?

Madison's Giraffes - BEFORE



Madison's Giraffes - AFTER



In summary...

- To provide the best vision health program possible, remember that screening vision is only 1 piece.
- Download and implement the 12 Components of a Strong Vision Health System of Care.
 - http://nationalcenter.preventblindnes s.org/sites/default/files/national/doc uments/12_component_vision_healt h_system_of_care%20%282%29.pdf
- Evaluate your program.
- Develop an Action Plan for finding children like Madison..





Questions for the presenters?





Conclusion of today's presentation

Be on the lookout for more *Year of Children's Vision* resources:

YOCV website:

http://nationalcenter.preventblindness.org/year-childrens-vision

Thank you for attending!

P. Kay Nottingham Chaplin, Ed.D kay@good-lite.com 304-376-9988

Kira Baldonado kbaldonado@preventblindness.org 312-363-6038



