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# **ESTABLISHING A COORDINATED, COMPREHENSIVE APPROACH TO CHILDREN'S VISION SCREENING IN THE U.S.**

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# Presenter Disclosures

Kira Baldonado

**(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this CME activity and I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.





A look at vision screening today...



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# Current approaches to preschool vision screening



Vision  
Screenings

Outcome

Data  
Collected

Care  
Received

Childcare	School	Dr's Office
Passed	Failed	Failed
Results on file	On file/Parent	Patient file
None needed	Assumed	Unknown



NATIONAL  
CENTER

for Children's Vision & Eye Health

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# Rates of Preschool-Age Vision Screening

- Limited data available.
- Most data from national surveys of parents.
- Approx. 40% children ages 5 and under had vision “tested” by doctor/ health professional (NHIS, 2008)
- Healthy People 2020 target-increase to 44%.

# Screening Rates in Children Ages 3-6 years.

- Approx 65% report ever having vision tested (MEPS 2007).
- Rates vary by age- 43% among 3-year olds, 79% among 6-year olds.
- Caution as some parents may report non-quantitative vision tests e.g. eye movements, cover test etc.
- Alabama Medicaid Administrative Claims data 2002-2003 suggests only 12% 3-year olds billed for quantitative vision screening, and 48% 5-year olds. (Marsh-Tootle et al 2008).





# Barriers to a Successful Vision Screening System

- Variation in screening methods
- Variations in pass/refer thresholds
- Little to no communication between providers
- Duplication of screening efforts
- Independently held databases
- Variations in requirements for training/certification
- Changes in laws and policy from state to state
- No baseline or measure of improvement
- Parents' distrust/lack of understanding
- Expense of screening





# Vision Screening for Preschool aged Children is Important!

- Improving the proportion of children receiving preschool vision screening (PVS) is a national priority (Healthy People 2020; OIG, 2010).
- Increased likelihood of eye problems for children with special needs and those from low socioeconomic backgrounds. (NS-CYSHCN 2010)
- USPSTF recommendation, target for Healthy People 2020, and included in Bright Futures guidelines.



It's time to shift to a comprehensive  
approach to vision screening



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

The National Center for Children's Vision and Eye Health was established at Prevent Blindness America in 2009 with support from the Maternal and Child Health Bureau to create a public health infrastructure that will promote a comprehensive, multi-tiered continuum of vision care and eye health for young children.

- **Mission:**

*To Improve Children's Vision through Strong Partnerships, Sound Science, and Targeted Public Policy*

- **Vision:**

*Develop a full continuum of care for young children by: Identifying vision conditions in children early, linking them to appropriate care, and ensuring they receive the care they need.*



## Current Approach to Children's Vision Screening & Surveillance

All Children aged 36 to <72 months

Children with Vision Problems

Received Valid Vision Screening or Eye Exam\*



## New Approach to Children's Vision Screening & Surveillance

All Children aged 36 to <72 months

Children with Vision Problems

Received Valid Vision Screening or Eye Exam\*



\* Children aged 36 to <72 months completing at least one valid vision screening in a primary care, public health or school/community setting and receive appropriate follow up or received a comprehensive eye exam by an optometrist or ophthalmologist.

# National Expert Panel

The Center called together leading experts in the fields of ophthalmology, optometry, pediatrics, research, public health and other related fields to create the National Expert Panel. The National Expert Panel came together to form recommendations for a comprehensive approach to vision screening.

## **PANEL LEADERSHIP:**

- Shirley Russ, MD, MPH, MRCP, FRACP (Chair)
- Sandra S. Block, OD, M Ed
- Joseph Miller, MD, MPH

## **PANEL MEMBERS:**

- Martha Dewey Bergren, DNS, RN, NCSN, FNASN, FASHA
- Robin Brocato, MHS
- Rick L. Bunner, MA
- Mary Louise Collins, MD
- Susan Cotter, OD, MS
- Lynn Cyert, Ph.D., OD
- Holly A. Grason, MA
- E. Eugenie Hartmann, Ph.D.
- Karen Hughes, MPH
- Amy K. Hutchinson, MD
- Alex R. Kemper, MD, MPH, MS
- Sandra Leonard, RN, MS, FNP
- Stacy Ayn Lyons, OD, FAAO
- Wendy L. Marsh-Tootle, OD, MS
- Renee Mika, OD, FAAO
- Bruce Moore, OD
- Marci Osburn
- Nicole Pratt
- Graham E Quinn, MD, MSCE
- Jean E. Ramsey, MD, MPH
- Michael X. Repka, MD
- Myrtis Sullivan, MD, MPH
- David K. Wallace, MD, MPH
- Tammy L. Yanovitch, MD



# NATIONAL EXPERT PANEL

## Activities

### Work groups developing recommendations

- 1) Performance Measures
- 2) Vision Screening
- 3) Data Collection and Reporting

### Goal: In 2012 the National Expert Panel will

- Publish journal articles and supporting documents outlining performance measures and model practices
- Promote integrated data systems focusing on best practices, closing gaps in reporting mechanisms, and supporting current trends in HIT
- Develop national recommendations for vision screening of preschool aged children.





# NEP Recommendations

- The recommendations were developed through a consensus process
- Incorporate review of published literature including basic research, reviews and policy statements, consultation with states that are developing their vision screening infrastructure, consultation with experts in the field, and with national and state agencies that are actively involved with performance measure development.
- The recommendations are strongly informed by available evidence, but also incorporate expert opinion.
- They will be the first set of national recommendations for a uniform approach to preschool vision screening conducted across both provider based and community based environments, data collection, and surveillance ever offered.



# Vision Screening Recommendations

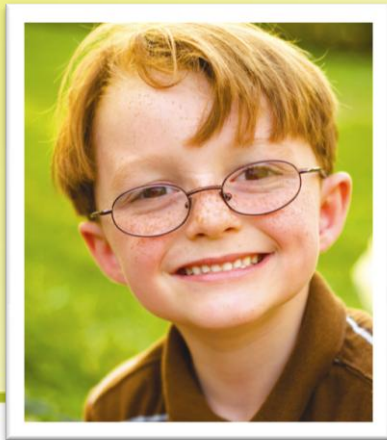
- Vision screening of children aged 36 through less than 72 months can be performed using a variety of scientifically sound recommended methods.
- Regardless of the screening method(s) selected, the method is only one part of a comprehensive screening program. The screening system is only successful when the result of the screening is used in a meaningful way.



# Considerations for vision screening in a preschool population

## Before screening:

- Different tools work in different environments
- Staff need formal training
- Pre-training for child AND parent is key



## While screening:

- Use of matching cards
- Reduce distraction and glare
- Keep the distance close

## After screening:

- Consistent data collection
- Share results with parents and other providers (with permission)
- Have eye care resources on hand
- Ensure all vision needs for learning are met



# Data Collection Recommendations

A standardized approach to vision screening surveillance needs to incorporate systematic data collection, including child-specific identifiers to ensure that the data are accurately linked to the child without duplications.

The approach should include simple data entry for community-based as well as health care provider office-based screenings, incorporate straightforward communication among these entities, and integrate pertinent private practice electronic medical record (EMR) information into the state-wide system.



# An Example of Integration

Ohio Impact SIIS- “What is not measured, is not done.”

- One of the Healthy people 2020 Action Grants
- Vision and hearing tab added December 2011
- Help capture vital health data and serve as the baseline for planning and implementing vision screening of young children
- Part of the movement toward use of electronic health records and communication between multiple systems
- Supports vision screening data from medical and non-medical providers
- Uploads data from other Electronic Medical Records and other screening databases
- Reduces duplication and increases follow up to care.



# Performance Measure Recommendations

- Performance measures are of limited use if states lack data to report on them, conversely, well-crafted performance measures can help to drive the development of appropriate data systems.
- The panel determined that valid and reliable measures should include all types of vision care received by the child (comprehensive).
- A child-based measure is preferred, which includes all sources of vision care and removes duplicate counts for children receiving care from more than one provider.

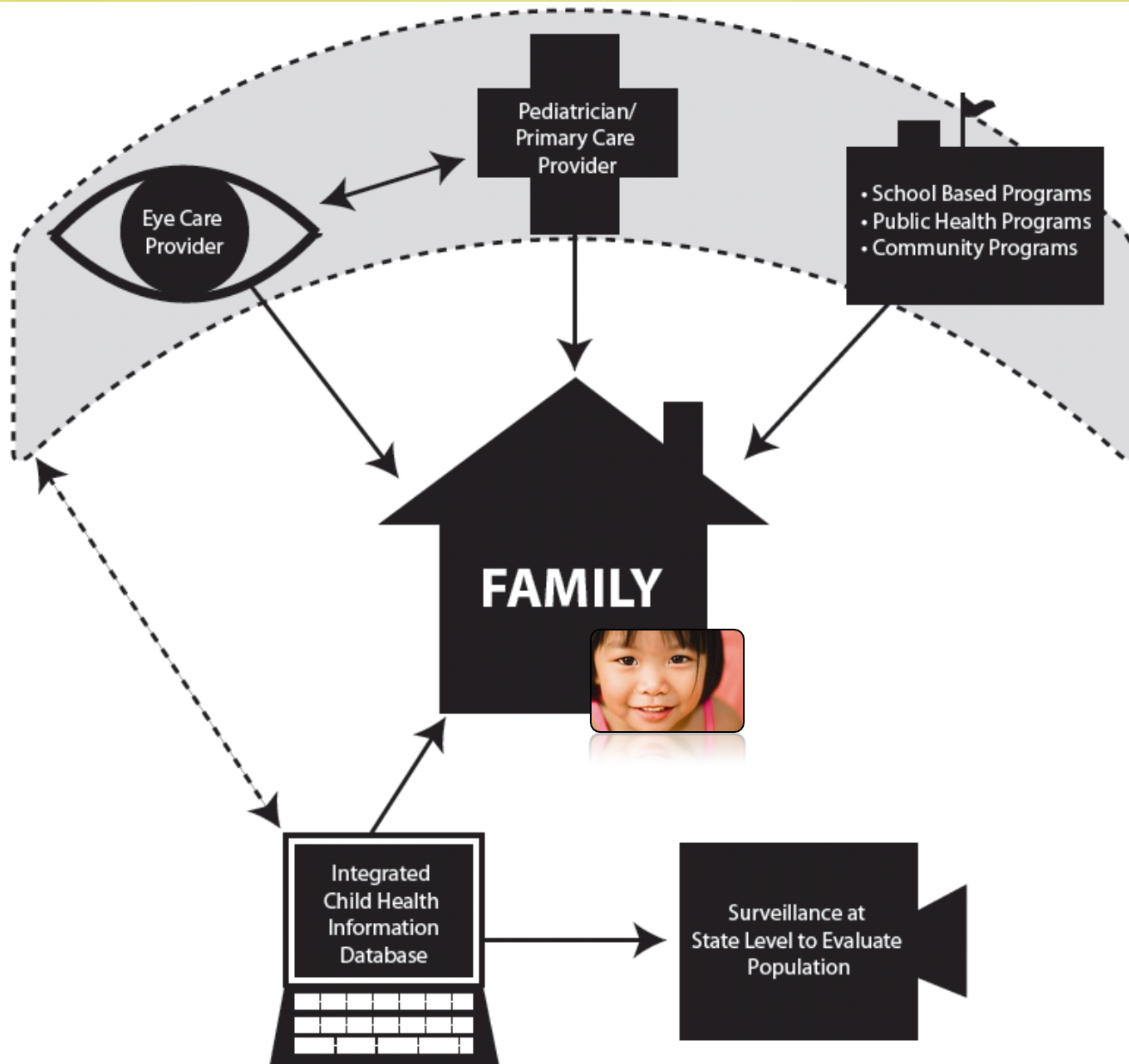




# Review: key features of the vision screening system

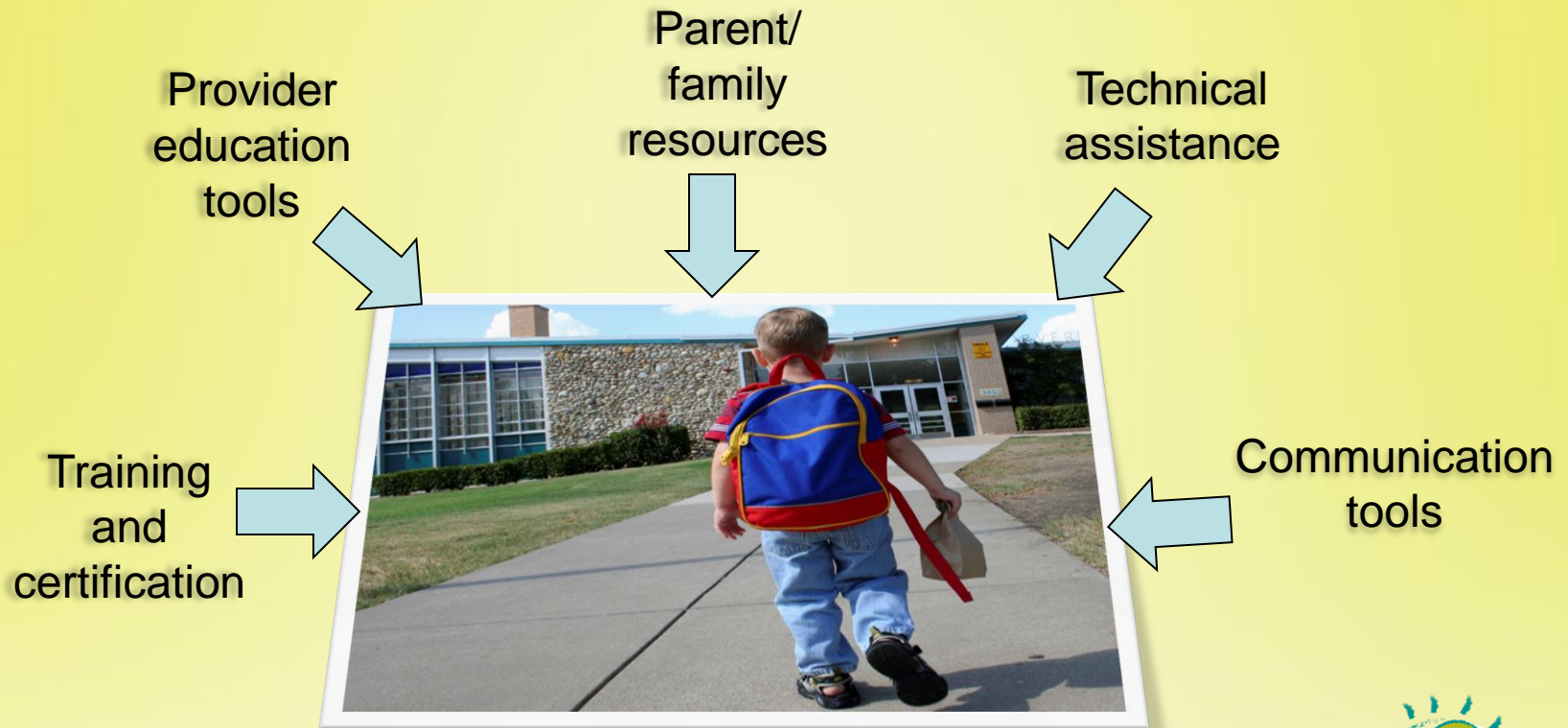
- Need to include valid screenings performed in all settings
- Family centered approach to all screenings
- Families informed of all steps verbally and in writing
- Integrated with medical home approach
- Integrated data systems accessible to all providers
- Regular system performance monitoring and reporting





# Resources to support implementation of the recommendations

Website for the National Center for Children's Vision and Eye Health



[www.nationalcenter.preventblindness.org](http://www.nationalcenter.preventblindness.org)



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# The work of the National Center for Children's Vision and Eye Health

- Addressing and eliminating common frustrations that are inherent to preschool vision screening
- Establishes a protocol that decreases duplication of efforts and increases communication between providers
- Empowers the vision screeners and families for better vision health in their children
- Supports vision screening efforts with technical assistance, resources, education, and awareness.





Any questions?



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

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**Thank You!**



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