

# Exploring the Public Health Nurse's Role in Establishing a State-Level Public Health System for Children's Vision

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## Presenter Disclosures

**Laura Anderko, Kira Baldonado, Kathleen Murphy**

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

No relationships to disclose

## Objectives

By the end of this session, participants should be able to:

1. List 3 reasons that a public health system for children's vision is needed at the state level.
2. Describe 3 characteristics of an integrated health information system that can support vision screening and outcome data.
3. Describe 2 resources that can lead to improved uniformity in vision screening at the state level.
4. Discuss the potential role of the public health nurse in operationalizing children's vision and eye health recommendations.

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## Children's Vision and Eye Health

Very common, very significant  
problem for children



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## Scope of the Problem

- Vision problems are present in 1 in every 20 preschool-age children in the U.S.
- Only 1 in 5 children screened by the age of 5
- Research has shown that infants and children with vision problems are more likely to experience developmental delays



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## What We Know: Children's Vision & Long Term Health

- Undiagnosed and untreated amblyopia has a detrimental impact on development leading to long term impacts
  - *self-esteem, physical ability, learning*
- Early vision problems can impair pre-reading skills and may predispose to early learning problems
- Cumulative costs savings and improved quality of life with early intervention, when most readily treatable and relatively inexpensive

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# Challenges

- Currently, there is no uniform approach for:
  - *screening procedures,*
  - *frequency of screening,*
  - *referral criteria,*
  - *follow-up methods, and*
  - *data collection*
- Lack of public health surveillance standards
- Little consensus among experts re: standards for frequency of screening; referral or follow up criteria

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## National Center for Children's Vision and Eye Health (NCCVEH)

- Goal: *Create a public health infrastructure that promotes a comprehensive system of vision care and eye health for all young children*



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# NCCVEH NATIONAL EXPERT PANEL

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## Highlights

- Evidence-based vision screening practices and improved follow-up to eye care for children 3-5 years of age
- Integration of child-level vision data into state health information systems (e.g., immunization data) to improve surveillance
- Establishment of program performance measures to track program accountability

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The development of a public health infrastructure will offer a comprehensive, multi-tiered continuum of vision care and eye health for young children and is essential for “**changing the game**”

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## Screening Recommendations

- All children 36-72 months should be screened annually ([Best Practice](#))
  - At least once between 3<sup>rd</sup> and 6<sup>th</sup> birthdays (Minimum Standard)
- Vision screening requires training and certification of personnel with recertification every 3-5 years
- Vision screening programs must use adequate space, age-appropriate equipment, and have established policies in place

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Vision screenings can be conducted by lay screeners, school nurses, and other screening personnel in public health settings, primary health care practices, or the child's medical home

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The efficacy of public health vision screening is predicated on a system of training, monitoring and surveillance that:

- Decreases variability
- Increases replicability
- Ensures valid results

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# INTEGRATED VISION CARE DATA

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- Is integrated with other health data
- Accepts data from educational, community, public health settings, primary care and eye care
- Is monitored for system performance
- Builds on existing state-level approaches to data integration following national guidelines for uniform data collection

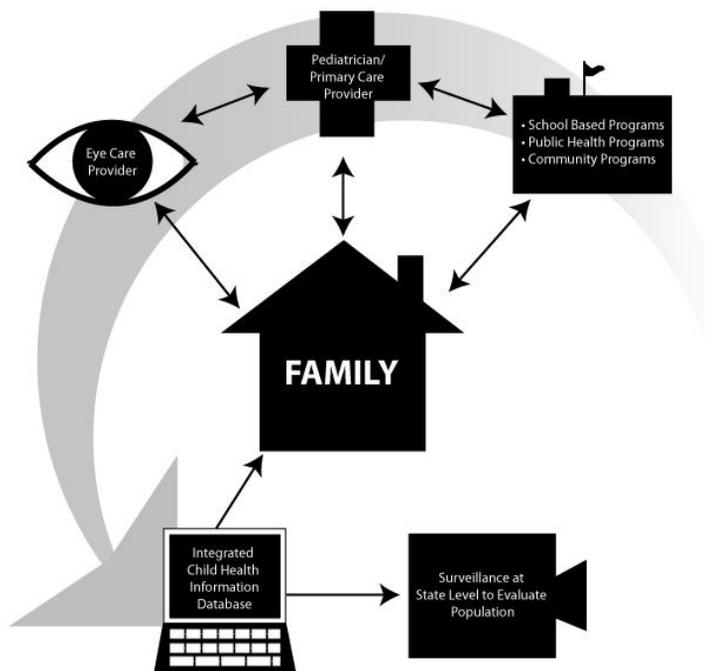
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## Example

Expansion of the **statewide immunization information systems** to incorporate information on vision screenings and eye care

- These systems already have the appropriate security measures to safeguard privacy of information.
- This approach would allow monitoring of vision care services provided by different types of health care professionals, including tracking of receipt of follow-up care and outcome measures.

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# PERFORMANCE MEASURES

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## Performance Measures

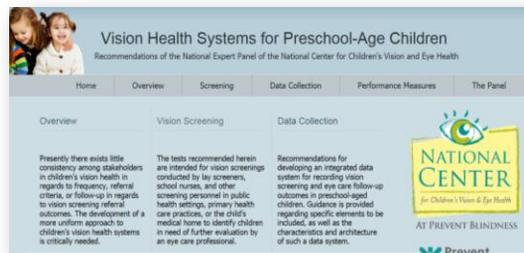
- Definitions developed to measure rates of children *who completed a vision screening in a medical or community setting using a recommended method, or received an eye examination by an optometrist or ophthalmologist at least once between the ages of 36 to <72 months*

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# RESOURCES TO SUPPORT SYSTEMS DEVELOPMENT

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## Tools for Success



- <http://visionsystems.preventblindness.org>
- Vision Health Program Annual Evaluation Tool
- Model Legislation
- Preferred Practice tools

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# THE ROLE OF PUBLIC HEALTH NURSES

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## Impact of Public Health Nurses

- Advocating for integration within existing data systems (e.g., immunization)
- Implementing policies that drive uniformity
- Coordinating and conducting screenings and follow up care
- Promoting best practices for hard-to-reach populations
- Monitoring system performance
- Informatics applications at point of care to decrease duplication of services, identify opportunities for follow up

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**THANK YOU!**



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