# Vision For The Future: The NM Lions Operation KidSight Program



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**2016 Head to Toe Conference** 

NM Lions Operation KidSight, Inc.

# Topics

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## **Overview of NM Lions Operation KidSight Program**



## **NMLOKS, Inc., Screening Team Locations**



🚫 - Future Program

Note that the NMLOKS Program Manager can conduct screenings in rural communities not currently covered by Lions screening teams.

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# NMLOKS, Inc., Screening Results (8/1/15 - 3/31/16) - # of 3-7 Year Old Students Screened & Referred -



## **Why Conduct Vision Screenings of Children?**



**Children entering 1<sup>st</sup> grade:** 

✓ 86% have never had an eye exam.

✓ 20-25% will have vision problems.

- □ Children are unaware they have a vision problem (they think everyone sees like they do).
- □ Normal visual development proceeds only if the brain receives an EQUALLY CLEAR image from EACH EYE.





- □ 70% of school-age children with a learning disability have some form of visual impairment.
- 95% of children's visions disorders can be corrected if detected early.

# The best defense is early detection!

### **Children's Vision Problems and Amblyopia**

- What is Amblyopia? -

The brain favors one eye over the other. The weaker eye is ignored and it is not adequately stimulated resulting in the nerve pathways between the eye and brain not maturing normally.



Amblyopia is the most common cause of monocular blindness (i.e., partial or complete blindness in one eye). While only 2 to 3% of children will actually develop amblyopia, the risk factors, which can cause amblyopia, are generally present in 12 to 15% of the 3 to 7 year old population.

## **Children's Vision Problems and Amblyopia**

- Conditions That Can Cause Amblyopia -



Strabismus → the eyes are crossed inward or turned outward



Farsightedness, nearsightedness, or astigmatism, especially if it is greater in one eye (Anisometropia).



Anything that prevents light from entering the eye, e.g., congenital cataract, drooping of one eyelid (ptosis), eye injury, etc.

## **Children's Vision Problems and Amblyopia**

- Treatment for Amblyopia -



Refractive error can be corrected by glasses, contact lenses or, if appropriate, lasik.

Wearing an eye patch over the stronger eye is a hallowed treatment for strabismus.





Another option is atropine eye drops to blur the vision temporarily in the stronger eye.

Treatment of strabismus may involve surgical correction of the eye muscle imbalance.



## Vision Screening for Amblogenic Risk Factors with the Plusoptix S09 Autorefractor



- Both eyes are measured simultaneously.
- Very quick acquisition time is 0.8 seconds.
- Can refract through glasses to check present prescriptions.
- Can facilitate vision screening in children who are difficult to deal with.
- Children who do not pass the screening are referred for a comprehensive eye examination.

#### **Example of a Plusoptix S09 Measurement Screen**

1) Patient data	
Next patient	
Surname	
Müller	
irst name	49 mm
Lieschen 🔹	
ate of birth Gender	
2008-09-09 🔻 female 🔹	
D	
2) Screening result	
L) octooning repairs	
Refer	
Kerer	
3) Documentation	
Neasurement report	
Label Screenshot	
4) Video control	Right eye Left eye
H H	Spherical equivalent [dpt]
Load video Save video	+0.50 +2.50
	Cylinder dpt]
	-1.25 -075
	Corneal reflexes
	Symmetric (0) 3.2 (20) Asymmetric 40 / 10
	Pupil size (mm) X X

**Refractive Errors** – identifies possible hyperopia/farsightedness (+) and myopia/nearsightedness (-).

**Cylinder** – Indicates a corneal irregularity or *astigmatism* that causes blurriness.

**Corneal Reflexes** – Indicates the degree to which an eye deviates from the parallel eye position. If greater than 10 degrees, *strabismus* may be present.

Pupil Size – If the difference in the size of the pupils is greater than a designated threshold, it indicates *aniscoria* may be present.

Anisometropia – If the difference in refractive error or cylinder value of each eye is greater than a designated threshold, *anisometropia* may be present.

Ptosis – A drooping eyelid which partially covers the pupil.





**Cataracts** – Can distinguish media opacities in the eye such as *cataracts*.

#### **Example of a Plusoptix S09 Measurement Report**

V1:	sion Screening Result	
Surname: First name: Date of birth: C Date of measurement: C	05/15/2008 08/28/2012	
	37.900	
Aleria		
Right eye	Spherical equivalent [dpt]   -0.50 -2.00   Refraction [dpt]   +0.75 -2.75 14° -0.25 -3.25 172°   Corneal reflexes [°] <th[°]< th=""> [°] [°] [°]&lt;</th[°]<>	eye
Referral criteria		Refer
Anisometropía	Spherical equivalent ≥ 1.25 dpt	Yes
Astigmatism	Cylinder ≥ 2.50 dpt	Yes
lyperopia	Spherical equivalent ≥ 2.50 dpt	No
Муоріа	Spherical equivalent ≥ 1.75 dpt	Yes
Corneal reflexes	Asymmetry ≥ 10.0 °	No
Anisocoria	Pupil size ≥ 1.0 mm	No
	exam. Vision Screening does not replace a complete eye examinat sion Screening must be conducted regularly as eyes may change ove	
creening performed at: MacArthur Elementary Myson McCool 1557 Red Fox Rd. as Cruces, New Mexico 88007 175-652-4029 575-973-0732		
ona Ana Lions Operation KidS	www.pediavision.com	

- Specifically identifies possible vision problem(s) the child may have.
- Provided to the school nurse after screening session.
- Parents of the referred child are informed:
  - ✓ Their child may have a vision problem.
  - ✓ Their child should have a full eye examination.
  - A voucher program exists for eye exams and glasses for referred children who are not covered by private insurance or Medicaid.
- Referral follow up information provided to NMLOKS.
  - ✓ Data necessary to determine that the screenings are not over-referring children.
  - ✓ Data needed for NMDOH and grant provider reports.

Reasons to Consider Using KidSight Services in Vision Screening Programs For Pre-K, K, & 1<sup>st</sup> Grade Children

□ Cost effective – no cost to school districts.

□ Relatively quick procedure – 1 child per minute.

- May free up school nurses from time spent for required annual acuity screening – more time for referral follow up.
- □ Can detect amblyogenic risk factors not revealed with acuity screening.
- □ Can easily screen developmentally challenged and nonverbal children.
- □ KidSight Program is available across NM.
- □ Many studies have validated the efficacy of vision screening.

The ultimate goal of NMLOKS, Inc., is to provide every NM child ages 3-7 years old with the opportunity for a free vision screening to ensure there are no vision "roadblocks" to interfere with their ability to read and learn.

# Save Our Children Sight Fund

- Began 1 Jan 2008 based on New Mexico Statute Authority 666.3. Save Our Children's Sight Fund (SOCSF) option.
- **NM residents can donate \$1 or \$5 to the Fund when renewing vehicle registration.**
- Money in the fund is appropriated to NMDOH, which shall administer the fund for the purpose of development and implementation of a vision screening program making vision screenings and follow-up comprehensive examinations available to New Mexico children regardless of family income.
- Contract between NMDOH and NMLOKS, Inc., initially signed January 2015 to administer the SOCSF. A follow up contract was issued for 2015-16 fiscal year. NMDOH will go out with an RFP for 2016-17 which will expenses to exceed \$50K if needed.
- NMLOKS, Inc., Program Manager coordinates with school nurses to identify 3-18 year students who have been referred by nurse's or KidSight screenings and who are not covered by Medicaid or other insurance.
- NMLOKS will cover 3-7 year old students while SOCSF will cover 8-19 year olds.
- NMLOKS, Inc., Program Manager will coordinate with school nurse to set up exam and provide glasses, if needed.



NM Lions Operation



Your \$1 or \$5 donation will help pay for an eye exam and glasses (if needed) for any student, age 3 – 19 years old, who is not covered by Medicaid or insurance.





Sight Fund

## NMLOKS/SOCSF Voucher Program Results - 1 Jul 2015 → To Date -

#### **Distribution of # of Students Serviced By Age Group**



#### **NMLOKS/SOCSF** Voucher Program Results

- # of Students Who Received an Eye Exam and/or Glasses by Community -



#### # Vouchers Serviced for the Save Our Children Sight Program and KidSight (1 Jul 2015 – 29 February 2016)



Stella Branci 1920	SOCSP	KidSight	Total
Total # Vouchers Serviced	236	115	351
Average Vouchers/Month	30	14	44
Projected # Vouchers to be Serviced for One Year	354	173	527
Projected \$\$ for Vouchers for One Year (@\$175)	\$61,950	\$30,188	\$92,1 <b>3</b> 8

## New NMLOKS, Inc., Initiatives

## - Parental Education Program -

□ 25%+ of <u>referred</u> children never get a complete eye exam.

- School nurses contact parents of referred children numerous times (if needed) but some parents don't feel their child's vision is important.
- NMLOKS is going to develop a program (e.g., PSA's, Newspaper ads, etc.) to inform/educate parents about the importance of good vision to their child's ability to read and learn.
- □ Signs parents and teachers can observe that child may have a vision problem:
  - ~ Constant eye rubbing
  - ~ Poor focusing
  - ~ Chronic redness of the eyes
  - ~ Squinting
  - ~ Difficulty reading

- ~ Extreme light sensitivity
- ~ Poor visual tracking (following an object)
- ~ Chronic tearing of the eyes
- ~ Being unable to see objects at a distance
- ~ Sitting too close to the TV
- ~ Abnormal alignment or movement of the eyes (after 6 months of age)
- ~ Having trouble reading the blackboard





# New NMLOKS, Inc., Initiatives

### - Spare Pair Program -

- Many times during a vision screening session, a student is referred who has glasses but never (or infrequently) brings them to school.
- Spare Pair Program would purchase a pair of glasses for these students that would remain at school.
- □ Spare Pair Program being funded by: GoFundMe Campaign https://www.gofundme.com/SPAREPAIRPROGRAM
- □ Spare Pair Program will help ensure that every student with glasses is able to see well to enhance their learning ability.





#### New NMLOKS, Inc., Initiatives

#### - Enhanced Screening for 3-7 Year Olds -

#### **MYOPIA / HYPEROPIA**



4.4

4.5

#### **NMLOKS, Inc., Contact Information**

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