

**KRONKOSKY CHARITABLE FOUNDATION
ROUNDTABLE DISCUSSIONS**

TOPIC: Children's Vision Screening

DATE: March 28, 2002

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PARTICIPANTS

Invited Agency Representatives

Robert Hobson	University of Texas Health Low Vision Services
Suzanna Garza	San Antonio Metropolitan Health District
James Wheeler	Lion Sight Center
Ann Uecker	Prevent Blindness-San Antonio
Jackie Shobe	East Central Independent School District
Ramiro Martinez	Texas Department of Health
Jack Abramson	Eye Can See Foundation
Judy Wright	Texas Commission for the Blind
Callie Simon	Texas Commission for the Blind

Foundation Staff and Trustees

Palmer Moe	Executive Director
Eusebio Diaz	Grants Manager
Byron Denney	Student Intern

Not present but provided additional comments

John V. Mumma, M.D.

PURPOSE

The purpose of this meeting is to discuss the extent and breadth of services available in the region related to vision screening for young children, and the depth of the screening process.

SERVICES PROVIDED BY AGENCY

The Texas Department of Health

- Certifies health workers and laypersons for vision screenings. Certifications are good for five years.
- Certifies nurses and parent volunteers, such as members of the Lions Clubs to help do screenings, a powerful program in Comal and Medina counties.
- In certification for performing screenings, volunteers are shown how to read eye charts, using any simple eye chart the clinics use, and how to respond to the young children who may not be able to read the alphabet, or children under the age of four who may not be able to verbalize responses.

Prevent Blindness

- Performs screenings, in order to detect impairments while they are still treatable, and disseminates donated glasses.

Lions Clubs

- Performs screenings through volunteer members.
- It has performed screenings on 25,000 people, mostly adults.

Texas Commission for the Blind

- Receives referrals from certified vision screeners for children who fail a vision screening.
- If a child has failed a vision test twice and needs glasses or a prescription, he or she can get a referral from the Commission. There is an income level requirement for services, based on the established poverty guidelines.
- Helps with the cost for an eye exam by referring to an optometrist.
- A doctor's report from the eye exam will allow a client to receive eyeglasses.
- The Commission has been able to negotiate with optical retailers for a flat fee for glasses.
- Clients can come to the agency for assistance every two years, and many are repeaters.
- In the vision program, for 2001, 134 of 230 referred patients received glasses.

San Antonio Metropolitan Health

- Provides screenings on a self-referral basis, gives referrals, and serves children, not requiring payment if families cannot afford it.

Eye Can See Foundation

- Provided comprehensive eye exams that included diagnosis of functional defects, such as near and far vision problems and astigmatism.
- If exams detected farsightedness, prescriptions for corrective lenses were given.
- Exams were done in stages, and one normal child took about five minutes or anywhere from two to ten minutes to complete the exam.
- The focus of the comprehensive exams was on early intervention and primary care.
- Children who were not being immediately helped were referred to an ophthalmologist for an examination. The ophthalmologist's services were covered by insurance, co-pay, or by the Foundation directly.
- Does not currently provide examinations due to lack of funding.

University of Texas Health Science Center

- Performs vision screenings, mostly in association with diabetic screenings, offers mobile services, and serves children with its mobile eye program.
- Screens children for position, reflex, reflection, pupillary change, distance between pupils, to determine mobility problems, size of pupils, and amblyopia (lazy eye).
- After screenings, examiners notify local eye doctors before patients come, the first visit being free for the patient.
- Has been utilizing a digital photo-screener on the mobile screening unit.

STATE VISION SCREENING REQUIREMENTS

- By law, schools are required to use the only approved charts for distance acuity testing.
- Vision tests must be done in grades 1, 3, 5, 7 and 9. Children who are newly enrolled are also required to undergo screenings, and screenings are performed in the even school grades as well.
- 4 year olds, kindergartners, and new entrants must be screened during the first 120 days of school. Nurses and volunteers may pick up other eye problems in children, but distance vision screening must be performed at a minimum.
- Children 4 years and under must read the majority of the 20/40 line of an eye chart to pass.
- Children 5 years and under must read the majority of the 20/30 line of an eye chart to pass.
- If a child fails, a second screening is required. If the child fails a second time, a referral must be made to an eye specialist.
- “Random dot E” tests are performed to test for amblyopia and strabismus, conditions that must be treated early or it is not correctable, and may cause blindness if left untreated.
 - This test is often done on preschool children.
 - In Random dot E tests, both eyes have to work together to see a plaque.
- Some agencies utilize a photoscreener that takes pictures of a person's eyes and compares the way light is refracted. This can be done with a Polaroid image or a digital image.
 - For pre-verbal children, photoscreening is the best test available.
 - Currently, TDH does not recognize this test as a substitute for eye chart screening.
- Screening requests come from schools that do not provide screenings or do not have a nurse. Schools that do not provide vision screenings, either internally or through a third-part agency are listed as Noncompliant with TDH.
- TDH only requires far point vision screening. Near vision problems are not an issue for the vast majority of children, typically this is more problematic until after 40 years of age.

VISION SCREENING STATISTICS

- In 2001, the East Central ISD screened 5,043 children, and out of 370 of these who were referred, 114 actually visited an eye doctor.
- In the three years that the Eye Can See Foundation provided examinations, 40,000 children were examined in various school districts across South Texas, 90 % of which had not had an eye exam before. 23 % of all 40,000 children required glasses to read in class.
- Prevent Blindness refers children who failed their eye examination to the school nurse. Approximately one out of four children screened is referred to the nurse.
- Prevent Blindness screens about 10,000 students of all ages per year, and about 500 of them fail the stereopsis.
- 5 % of all children tested by the Eye Can See Foundation had glaucoma, and a small amount also suffered from diabetes, Brown Syndrome, and other symptoms not related with children, including pathology.
- Out of 40,000 examined by the Eye Can See Foundation, three children with undetected brain tumors had been diagnosed, and another was diagnosed with diabetic retinopathy.
- Amblyopia or “lazy eye”, a treatable yet potentially blinding ailment is a vision problem that must be checked in children very early.
 - Between 2% to 4% of children have amblyopia
 - Amblyopia may develop secondarily to strabismus, or “cross-eyed” if not checked and corrected early enough
 - May be detected with distance visual acuity using stereopsis
- Prevent Blindness in Bexar County, 1998-1999:
 - 439,000 total children under the age of 17 resided in Bexar County.

- Of 158,000 students given vision screenings, 14,483 failed vision tests.
- 167 of 1,231 licensed day cares were tested, and 1,000 of these 7,000 children needed correctional.
- In 62 private schools, 1,320 students out of 17,350 were referred to an eye doctor.
- The organization estimates that 255,000 children under age 17 are left without vision services.

GAPS IN SERVICE

- Much of the East Central district is rural, so families do not have transportation available, and often, vision is a low priority, in comparison to other, more immediate and critical needs.
- Vision and hearing are not high priorities in rural areas if the problem is no larger than low grades or poor class performance.
- Lions Clubs raise funds for vision program for their respective community. Funds are often expended quickly in many cases.
- According to one agency, approximately 90% of patients followed through after being referred for an eye examination.
 - Patient follow through to a referral is shown to be more successful if the referring agency conducts follow up calls to the parents of the child.
 - Lack of follow through on a referral may be more a result of the parents' lack of urgency or acceptance of the severity of their child's vision problems than financial.
- Patients are not knowledgeable enough about services available to them.
- Donors and supporters, such as optometrists, ophthalmologist, and eyeglass retailers, cannot help long-term. Agencies have to continuously contact these providers to ascertain the level of support they might provide for those unable to pay for services.
 - To change it, must approach the state's Health Department. Unsure whether it is a department policy or legislative mandate.
 - If a child fails the far point exam, there is a good chance of near vision problems. This half of the problem is being overlooked.

SCREENING vs. COMPREHENSIVE EYE EXAMINATION

- Comprehensive examinations for all children is cost prohibitive.
- Only an approximate 25% of all children require a comprehensive exam.
- Many schools are hesitant about a program coming in to conduct comprehensive examinations due to concerns that it is a self-promotion opportunity by optometrists.
- The problem with school vision screening is that not every school has a registered nurse, and may simply be using a secretary to perform a nurse's duties.
- School nurses spend so much time with other issues, such as administering medication, that screening, referrals and follow-up for comprehensive examinations are inconsistently handled.
- The disadvantages of using a Polaroid photoscreener are that it is less precise, limited and more expensive than using digital imaging. Using digital is efficient, quicker, and less expensive per picture, however the initial equipment cost is high, around \$25,000 per system. The digital system has been demonstrated locally, and is portable.
- An inadequate vision screening can result in overlooked problems or misdiagnosis of a vision problem.

FUTURE CONSIDERATIONS

- The city is so populated that one organization cannot put a program together to solve the vision problem.
- More of the optical community, including optometrists, ophthalmologists, and vision centers, need to be involved in a solution.
- A practical side was discussed to better perform screenings so that not so many children are misdiagnosed and would be used to refer to a program performing comprehensive exams, helping keep the number of children receiving exams low:
 - How could we do it better so that those who need a comprehensive eye exam get one?
 - Is there a way to improve the quality of a screening so that children aren't misdiagnosed?
 - How can eye doctors more involved in the screening process?
 - Is there a way to implement a process so that groups providing comprehensive exams receive referrals from groups providing accurate screenings?
- Doctors and vision specialists need to promote the solution from within so they can become a part of it.
- There is a need to feed referrals from a screening program to a program offering comprehensive exams, from an established standard to make it more worthwhile and less expensive.
- It might be better to focus on an age range subset to prevent long-term vision problems.
- The idea of photo screening works well for younger children, because there is no standard for charts in schools, lighting is often bad, etc. for doing vision screenings.
- Schools show some resistance because the eye exams are not school mandated, and the children are often pulled out of class for other reasons.
- Children need to have confidence in the classroom that they can succeed and get past vision problems.
- If children cannot see, they cannot read and succeed. An inability to read or perform in class places the child at greater risk.
- No one group can fund the vision screening needs of the community. It has to be a merging plan that the state buys into so that it will give more funding for vision.
- Establishing a coordinated effort to manage referrals available from ophthalmologists and optometrists willing to provide free services to the indigent.
- More information on the digital photoscreener is desired as a practical, yet accurate screening method.
- Support the acceptance of digital photoscreening as a practical and viable screening method.