Mission Statement

- InfantSEE™ is a public health program, to ensure that optometric eye and vision care becomes an integral part of infant wellness care to improve a child’s quality of life.

InfantSEE™

- The American Optometric Association encourages all doctors of optometry to participate in InfantSEE™ by providing the initial eye and vision assessment of the infant within the first year of life as a no cost, public health service.

The Primary Benefit

- Identifying Infants at Risk Allows More Time-Appropriate Intervention:
  - Treatment of Amblyopia
  - Treatment of Strabismus
  - Detection of Significant Disease (expected positive findings in <5% of infants)

The Problems Are Significant

- 1 in 20 will develop Amblyopia
- 1 in 15 will develop Strabismus
- 1 in 15 will show significant Refractive Error
- Retinoblastoma – rare but possible 1/20,000
- Numbers are irrelevant if infants aren’t seen
- Impact on Infant Development = priceless

The Assessment Protocol

- Clinical Practice Guidelines
  - Visual Acuity
    - Fix and Follow, Richman Face Paddles, Vertical Prism
  - Refractive Status
    - Mohindra Retinoscopy, Cycloplegic Retinoscopy
  - Binocularity (alignment)
    - Cover Test, Vertical Prism, Bruckner, Hirschberg
  - Ocular Motility
    - EOM Motilities
  - Ocular Health Assessment
    - Visual Field, Pupils, Gross External, Dilated Internal
Role of Primary Care

• Primary Care Providers are not expected to handle all issues identified.
• Identification of areas of concern are the key!
• Referral to a Pediatric Optometrist for further evaluation and care or when surgical intervention is appropriate to a Pediatric Ophthalmologist.

Public Health Means

Public Education

• Doctors will determine appropriateness of periodic professional care
  – Coordinate referrals to optometry specialty or ophthalmology specialty
  – Follow-up “3x3” – recheck all significant findings every three months until confirmed three times
  – Complete eye examinations at 3 and 5 or as determined by the InfantSEE™ optometrist

Scheduling appointments

• Time slots: OV slots not full exam slots
• Time of day: right after nap time
• Staff inform Mom while appointing:
  – appt. takes a little over 1 hour (30-45 minutes of dilation time)
  – Bring bottle, pacifier, favorite toy and stroller for napping, diapers, snack

Video

• Video of InfantSee assessment

Preparation is everything!

• Time is of the essence
• Have staff put all necessary equipment out before you see patient
  – Transilluminator, Direct, Retinoscope, 20D lens, puppets, finger toys, 10° prism, cyclogyl and trial lenses (3, 4, 5, 6, 8)
• Don’t put baby in room until you are ready to walk in
• Review history before enter room

Practical Suggestions

• Mom holds baby on her lap
• Talk about history and exam at same time
• Forcefully hold baby’s head= crying: not helpful
• If one test doesn’t yield results try another
• All tests listed do not have to be done for each category
• Putting drops in: lean baby in feeding position, put drop in eye closest to Mom first then the other eye
The Exam

- Observe baby’s eyes as you greet child.
- Use thumb to do cover test while baby looks at pen light, also noting Hirschberg reflex and checking pupil responses.
- Using a rattle and a finger puppet one in each hand introduce peripherally and note field size and accuracy of fixation.

Exam

- With a small target introduce a 10 base up prism in front of one eye to note shift in focus between images.
- With direct Ophthal 50cm Bruckner
- Dry Retinoscopy with loose trial lenses
- 1% cyclo. Lay baby in Mom’s arms like feeding. Drop eye closest to Mom first.
- Send out to feed or nap for 45 min.

Exam

- Return to wet Ret
- Internal with BIO have Mom hold baby up over her shoulder. Stand behind her and look in child’s eyes.
- Review findings and Recall

EXPECTED NORMS

- 6 MOS: PERRL, Foveal Reflex may or may not be present. Nasolacrimal canal open, visual acuity responsive to 20/80-20/200 (PL), Dry Ret. Pt to 1.25D variability good attention, follows moving targets while sitting. Versions full and smooth with head movement, NPC to nose, begins to show reaching for stereo targets.
- 9MOS: Foveal reflex present 50% of time, versions full and smooth in all directions, NPC to nose, good response to stereo, visual acuity responsive to 20/50-20/100 (PL), Dry Ret. +0.50 with up to 1D variability with good attention to target.

EXPECTED NORMS

- 12 MOS: Foveal Reflex present 90% of infants, versions full and smooth in all directions, NPC to nose, good response to stereo, Acuity 20/50-20/80 (PL), Dry Ret. +/- 0.50 up to 1D variability with good attention

Causes for Concern

- Ocular Motility:
  - a. Normal: ability to look at the target, follow and maintain for a brief period or until something else captures attention
  - b. Concern: Reduced ability to gain visual attention in primary gaze
  - c. Problem: Any limitation of movement in the cardinal meridian
Causes for Concern

- **Binocular function (Cover test)**
  - a. **Normal**: stereo response on gross targets
  - b. **Concern**: no response
  - c. **Problem**: observable strabismus

- **Refraction**
  - **Hyperopia**
    - a. **Normal**: less than +3.50 discuss emmetropitization and re-eval at age 3
    - b. **Concern**: +3.50+5.00 rule of 3 (recheck in 2m)
    - c. **Problem**: Over +5.00 establish in an Optometric office

- **Myopia**
  - a. **Normal**: less than 1D watch, see at age 3
  - b. **Concern**: slightly over 1D follow in 6m
  - c. **Problem**: over 1D establish in OD practice

- **Astigmatism**
  - a. **Normal**: less than 2D watch, see at age 3
  - b. **Concern**: 2.00-3.00D follow in 6m
  - c. **Problem**: over 3D establish in OD practice

- **Anisometropia**
  - a. **Normal**: less than 1D see at age 3
  - b. **Concern**: 1-2D follow in 6m
  - c. **Problem**: Over 2D establish in OD practice

Causes for Concern

- **Looking Behavior**
  - a. **Concern**: reduced ability to fixate recheck in 1m
  - b. **Problem**: fixation preference for one eye
    - Failed acuity test
    - Establish in OD practice

Ocular Health

- **Problem**: any noted anomaly- establish in appropriate health care practice

End of Exam

- **Discuss pertinent findings with Parents**
- **Give Visual development suggestions**
- **Recommend next suggested visit age**
- RETURN FORM SAME DAY TO AOA OFFICE!!!
Community Awareness

- Newspaper articles in local paper
- Notify School nurses thru a letter at beginning of school year with gift bag
- Public speaking to local churches, Mothers Day Out, PTA, Service Organizations. All groups need speakers!
- Newsletter feature
- Office Website, Facebook, Twitter

In Office Promotion

- Have a rocking chair in waiting room with a sign “Reserved for InfantSEE Mother” (generates questions)
- Sign at front desk “Has your 6 month old had his/her first eye exam?”
- Be proactive and positive- Dr. attitude flows to staff
- Don't hide news about participation

Forms, Forms, Forms

- SEND IN FORMS THE SAME DAY
  - Forms are all free from AOA: exam, history, return labels, brochures, promotional aids, videos, slide shows, press releases
  - Make one staff person in charge of mailing in form the same day of visit.
  - Critical for continued grant funding and collection of data for better understanding of infant vision norms

Presents Opportunities...

- Provide Infants Definitive Eye Care
- Educate the American Public
- Further Recognition as Primary Eye Care Providers
- Demonstrate Optometry's Commitment to the Entire "Lifecycle" of Eye Care
  - Periodic Professional Eye Care

IT ALL BEGINS WITH THE INFANT!