

Widening InfantSEE Knowledge (WInK):
An InfantSEE Awareness Program

by

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ABSTRACT

Background: Eye disorders can occur in infants and young children who do not have the ability to voice their concerns. InfantSEE is a program sponsored by the American Optometric Association, The Vision Care Institute of Johnson and Johnson Vision Care, Inc., and The Allergan Foundation in which participating providers give a complimentary eye exam to infants under twelve months of age. A primary way for parents to find out about the InfantSEE program is through their child's pediatrician or other primary care doctor, requiring those doctors to know the program details and eligibility. Widening InfantSEE Knowledge (WInK) was designed to encourage participation and spread awareness about the InfantSEE program in Michigan by optometric educational outreach to local pediatrician offices.

Methods: With the use of internet and journal advertisements, optometrists throughout Michigan were encouraged to provide presentations to their local pediatrician offices describing InfantSEE. These optometrists were then responsible for scheduling an inservice and returning the completed surveys in order to measure the success of WInK

Results: A total of four presentations were given with sixteen surveys collected. Prior to the presentations, the understanding of what the InfantSEE program entailed and who performed InfantSEE examinations was found to be low. Attendees indicated that their understanding of InfantSEE was expanded through the WInK presentation.

Conclusion: The WInK program was shown to enlighten pediatricians, family doctors, physicians assistants, and nurses on what InfantSEE entails and further expand their knowledge and understanding of the program.

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Introduction

Although young children and infants may not have the ability to verbalize concerns with their ocular health or vision, there are many ocular pathologies that can occur at an early age. In fact, a study on the prevalence of eye disease in early childhood in 2010 found that about 6 in 100 children were reported to have an eye disorder by the age of three.¹ The majority of these cases included strabismus, amblyopia, and refractive error, all of which can be treated, with a better prognosis, if identified early. Other, more severe ocular pathology such as glaucoma or retinoblastoma, an intraocular cancer, can have traumatic or life-threatening effects if they are not detected at an early age.

A typical refractive error in an infant is about 2.0 Diopters of hyperopia, however when refractive error falls outside of this range there can be an increased risk for needing glasses in the future, strabismus, and amblyopia.² It has been found that a refractive error of 3.0 Diopters or more of hyperopia is one of the strongest predictors of esotropia.³ Similarly, a refractive error of 2.5 Diopters or more of astigmatism is one of the most compelling predictors for exotropia.³ Anisometropia is another leading cause of both esotropia and exotropia. If uncorrected, such a refractive error or subsequent strabismus can also often lead to amblyopia, which can be difficult, costly and quite time-consuming to reverse or correct at a later age.^{3,4,5} Factors such as premature birth and smoking during pregnancy have been found to have an increased risk for strabismus and astigmatism and may indicate an even greater importance for an eye exam at an early age.^{3,6}

Although not as common as refractive error, one of the most devastating infantile

ocular diseases is Retinoblastoma, which occurs in one in 20,000 infants in the United States.⁷ Retinoblastoma is a malignant tumor of the retina that can occur monocularly or binocularly and can cause devastating side effects like weakness, bone pain, seizures and even an altered mental status with central nervous system involvement. These systemic side effects can be avoided, however, if the disease is caught early. If diagnosed while still in an intraocular disease stage, survival rate is 85 to 98 percent, compared to a 0 to 50 percent survival rate once extraocular symptoms occur. This once again highlights the considerable benefits of comprehensive infant eye exams.

Vision and ocular function develop early in an infant's life. At three months an infant begins to follow and reach for moving objects.⁸ By six months eye and body coordination begins to develop and the eye's ability to focus is intact. As an infant continues to develop over the next six months to one year, eye coordination continues to develop and eye contact begins to replace physical contact. An eye examination is recommended between six months and one year old in order to evaluate these important developmental milestones for irregularities, screen for ocular disease and refractive error, and to initiate treatment if necessary.

InfantSEE is a program sponsored by the American Optometric Association, The Vision Care Institute of Johnson and Johnson Vision Care, Inc., and The Allergan Foundation, which provides a complimentary eye exam to infants under twelve months of age.⁹ The program was launched in June 2005 and includes participating optometrists in all 50 states. Examinations normally include an assessment of extraocular muscle function, binocularity, eye alignment and fixation, determination of refractive error, and a

comprehensive evaluation of both external and internal ocular structures.

There are hundreds of InfantSEE providers in Michigan, and the InfantSEE program has an easy to use website that enables parents to locate providers near them. However, this can only be accomplished if parents know about the InfantSEE program and are aware of the importance of early eye examinations. Pediatricians, nurses, and other healthcare providers that come in contact with patients and their parents from early ages are an important source of information for parents.

In order to encourage the spread of information about InfantSEE, a program named Widening InfantSEE Knowledge (WInK) was designed with the intent of increasing knowledge about InfantSEE in the offices of local pediatricians or providers who examine children. This paper highlights how the program was designed, whom it targeted, program success and areas for opportunity, and the results of feedback by healthcare providers and their staff about WInK.

Methods

Widening InfantSEE Knowledge (WInK) was designed to encourage optometrists throughout Michigan to present information about InfantSEE to local healthcare providers who examine children, particularly pediatrician offices. The optometrists were recruited to give presentations describing InfantSEE through advertisements.

The Widening InfantSEE Knowledge program was advertised on the Michigan College of Optometry and the Michigan Optometric Association Facebook pages and in the *Michigan Optometrist* Journal's January/February 2013 issue (See Appendix A).¹⁰

Interested optometrists e-mailed the researchers and further instructions and information

were sent electronically via emailed WInK information packets. These information packets included a step by step guide for successfully completing the WInK program (See Appendix B), a letter to personalize and send to the targeted audience (See Appendix C), a Powerpoint presentation designed by the researchers in which the presenter could make any applicable edits (See Appendix D), and a questionnaire for optometrists to give to the presentation attendees in order to measure the success of the program and collect suggestions for improvement (See Appendix E).

The researchers were available to work with participating optometrists to schedule presentations with local doctors and staff in their area if necessary and funding was made available through the Michigan Optometric Association Children's Vision Care Committee for mailing costs and other presentation expenses on a first come first serve basis. The presentations were intended for pediatricians and other primary care providers dealing with infants and intended to last no more than ten minutes in order to accommodate the busy schedules of the optometrists, physicians, nurses, and office staff. The pre-designed Powerpoint described the InfantSEE program, how the exams are administered, and who is eligible. Following each presentation, anonymous surveys were distributed for attendees to complete regarding information obtained about the program. Surveys were intended to be mailed or scanned and emailed by the presenters back to the researchers at the conclusion of their program participation.

Surveys consisted of seven questions. Those taking the surveys were asked to answer the questions on a five point scale; strongly disagree, disagree, neutral, agree, and strongly agree (See Appendix E). The first four survey questions asked about the participants' knowledge of InfantSEE before attending the WInK presentation, and the last

three about the understanding of InfantSEE after the presentation and whether or not the participant would recommend the WInK program to a colleague. A space was also available for any comments. These surveys were then analyzed by the researchers to ascertain the success of the WInK program.

Results:

Overall, only six optometrists expressed interested in participating in the program and requested more information. In addition, two optometrists were personally asked to participate by the researchers. Of the six InfantSEE providers who had expressed interest, and were provided with WInK materials within one to two days of requesting information, none returned surveys. Two providers responded to a follow-up email from the WInK researchers expressing that they had not yet found time for the presentations and were having difficulty contacting pediatricians. The remaining four were unable to be reached for follow-up.

The two providers that the researchers worked with personally were able to schedule and provide WInK presentations to local healthcare providers. These presentations were given in Escanaba, Iron Mountain, and Norway, MI. The presentations lasted 5-10 minutes in length, and InfantSEE pamphlets obtained from the InfantSEE website were given to the health care providers who were in attendance for them to pass along to patients. To date a total of four presentations were given, and sixteen surveys were returned.

The initial survey question asked attendees if they had heard of the InfantSEE program in the past; 31.25% reported strongly disagree, 50% disagree, and 18.75% reported strongly agree. Before attending the program, 25% strongly disagreed, 56.25%

disagreed, and 12.5% agreed and only 0.06% strongly agreed that they understood what constituted the InfantSEE program. When asked if participants knew who performed InfantSEE exams, 12.5% agreed, 31.25% strongly disagreed, and 56.25% disagreed.

The fourth question asked attendees if they had recommended an InfantSEE exam to a patient; 12.5% agreed that they had recommended an InfantSEE exam to a patient, 37.5% strongly disagreed that they had, and 50% disagreed.

When asked if there was a better understanding of InfantSEE after attending the WInK program, 68.75% strongly agreed, and 31.25% agreed. All participants reported that they are likely to recommended an InfantSEE exam to patients after attending the program, 87.5% strongly agreed, and 12.5% agreed. Of those who attended WInK presentations, 87.5% strongly agreed and 12.5% agreed that they would recommend the WInK program to a colleague.

On the five point scale provided on this survey, the mean understanding of an InfantSEE exam was 1.88 before attending the program, and 4.69 after attending the program. This is a 56.15% increase in knowledge of InfantSEE. Of the sixteen surveys completed, there were no additional comments or suggestions given about the program.

Discussion

Through the data collected from those that attended the WInK presentations, the vast majority had not heard of InfantSEE, did not understand what an InfantSEE exam constituted of, and were unaware as to who was providing InfantSEE examinations. Only 18.75% of attendees had heard of InfantSEE, and only three out of sixteen (18.75%) had an understanding about the program. Furthermore, only 12.5% had recommended an InfantSEE examination to a patient in the past. These results show that many of the health

care providers that interact closely with infants and their parents are unaware of InfantSEE and what is offered by the program.

All of those in attendance at WInK presentations reported a better understanding of the InfantSEE program following the presentation and said they would be likely to recommend an InfantSEE examination to patients in the future. The surveys showed that attendees would recommend the WInK presentation to colleagues as well.

Unfortunately, participation by InfantSEE providers was very disappointing. This was attributed to difficulty coordinating a time that worked for for the optometrist, physician, and their office staff. It was also expressed by one of the volunteering optometrists that it was more difficult to contact the doctors in the area than anticipated, causing a delay in presentation scheduling. In addition, although offered, funds for supplies or food for attendees were not requested by any of the participating optometrists, which may have been another factor in the low number of completed presentations.

It should be mentioned that while working with the providers who were able to give presentations, it was found to be relatively easy to schedule the short inservice with pediatricians, family doctors, physicians assistants, and nurses in the surrounding area and give the presentations. These optometrists however, were contacted personally by the WInK administrators. These presentations organized with the direct help of the project researchers were the only to be completed. This suggests that if programs like WInk are designed in the future, it would behoove researches to recruit participating optometrists on a personal basis in order to ensure program success.

Conclusion

Despite the disappointing participation, it can be concluded that the WInK program was successful in spreading InfantSEE awareness in the areas where presentations were completed. If more presentations like this were to be given in the future, they would undoubtedly increase InfantSEE awareness and in turn expected referrals for InfantSEE exams. Although InfantSEE is a program designed to examine infants for abnormal refractive error, ocular disease, or any binocular vision abnormalities at an early age, the benefits of such examinations can only occur when parents know such a program exists.

Pediatricians, family doctors, physicians assistants, and nurses are in close contact with parents and their infants and are a great referral source. However, this research suggests that before these referrals can be made and thus increase awareness of InfantSEE within the general population, those who are in close contact with infants and their parents from the beginning must understand the InfantSEE program. Therefore, although this research has concluded, WInK materials will still be available upon request and the six doctors who already received the materials were encouraged to continue pursuing presentations as their schedules allow.

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Appendix A

WInK Advertisement



Widening InfantSEE Knowledge
An opportunity to inform your community about InfantSEE

We Need YOU!

- Optometrists sought to present InfantSEE to local pediatricians, nurses, and staff
- All information for presentations will be distributed in an electronic presentation kit
- Posters and brochures will be mailed to you from InfantSEE to take along
- Easy step by step guide for contacting local health care providers included
- A simple survey will be used at the end of presentations to evaluate efficacy
- Financial assistance available for providing refreshments during presentation on a first come first served basis
- If interested in participating or for more information contact Dani Smith and Katie Sulter at Widening.InfantSEE.Knowledge@gmail.com



Appendix B

Wink Step by Step Guide

Wink Step by Step Participation Guide



Thank you for participating in the Widening IntraSens Knowledge (Wink) program! We are excited to have you on board. Together our efforts can promote the important work of the IntraSEE program, educate medical doctors and pediatrician offices, and increase the cohesion and interprofessional relationships of your optometry practice with your community. Below you will find a step by step guide to help with your success.

1. Form a list of all pediatricians, nurse practitioners, and other healthcare providers in your area that routinely see infants. This may include your local hospital birthing centers at your discretion.
2. Contact them with the provided letter, making any appropriate edits to customize the letter for your practice.
3. Follow up with a phone call. Request to speak with the practice manager or head nurse, and ask to schedule an in-service.
4. As soon as your presentation is scheduled, email the Wink program at WideningIntraSEE.Knowledge@gnssd.com to inform program administrators about when and where you will be presenting, how many participants you anticipate and if any funds are required.
4. If not scheduled an initial phone call consider calling again. Remember that offices are busy and persistence pays off.
6. If you require assistance with scheduling the presentation, Wink program administrators are available to help at the provided email address.
7. Present the in-service.
8. Collect survey data at the in-service using the survey provided.
9. Mail or email completed surveys to the Wink program. This step is crucial to support program success and continue funding.

Mail completed surveys to:

Karla Sauter
1848 Beach St.

Saginaw, MI 48602

Alternatively, scan surveys and email to:

WideningIntraSEE.Knowledge@gnssd.com

Thank you for your participation in the program!



Appendix C

WInK Letter for Local Healthcare Providers

Your Practice Logo or Letterhead (if desired)

Today's Date



Your Practice Name and Address

Dear Doctor _____ and Staff,

InfantSEE is a national program in which participating eye care providers administer well child eye exams to infants under 12 months of age at no charge. The purpose of InfantSEE is to identify any vision or eye health problems at a young age so that every child can live up to his or her full visual potential and be free from debilitating or even life threatening ocular health conditions. I am an InfantSEE provider, and would like to schedule a short inservice in order to inform you and your staff about InfantSEE. The program I would be presenting is titled Widening InfantSEE Knowledge and should take only 10-15 minutes. It can be scheduled at a time most convenient for you, including over the lunch hour, before your practice opens or at the conclusion of the work day. I will also be providing office posters and brochures about the program for your display or distribution if desired.

If you would be willing to participate in this program, please contact me at:
email address
telephone number

Thank you in advance for your time. I look forward to the presentation!

Sincerely,

Your Name Here

Appendix D

WInK PowerPoint Presentation

Widening InfantSEE Awareness




Your Name Here

WInK Eye Opening Facts

- 1 in 10 children is at risk from undiagnosed vision problems
- 1 in 30 children will be affected by amblyopia – often referred to as lazy eye – a leading cause of vision loss in people younger than 45 years
- 1 in 25 will develop strabismus – more commonly known as crossed-eyes – a risk factor for amblyopia
- 1 in 33 will show significant refractive error such as near-sightedness, far-sightedness, and astigmatism
- 1 in 100 will exhibit evidence of eye disease – e.g. glaucoma
- 1 in 20,000 children have retinoblastoma (intraocular cancer) the seventh most common pediatric cancer!

© 2010 Information is provided by InfantSEE.org



WInK InfantSEE Program

- A no-cost public health program to provide nationwide eye care for infants
- Created by The AOA Foundation and The Vision Care Institute, LLC



WInK





Qualifications

- InfantSEE provides a free comprehensive eye examination to any infant under the age of 12 months.
- An exam is recommended between 6 and 12 months
- By 6 months infants have reached the developmental milestones required for fully functional visual abilities





WInK The InfantSEE Exam

- Optometrist evaluation includes:
 - Eye mobility and alignment
 - Eye health evaluation
 - Refractive error measurement, looking for excessive amounts of nearsightedness, farsightedness, and astigmatism.



WInK Thank you!

- Please fill out and return the provided survey!



Appendix E

WInK Post-Presentation Survey

Thank you for your participation in today's presentation about InfantSEE. The following survey will be anonymous and used in order to quantify the success of the WInK program. By completing this survey, you are providing permission to use your anonymous answers in our measures of program success. You may choose not to participate at any time. Questions about this program or survey can be directed to Dr. Sarah Hinkley at sarahhinkley@feris.edu or lrh@feris.edu.

Please take a few minutes to let us know what you thought of the presentation and any suggestions you may have for the improvement of WInK.

InfantSEE Questionnaire

Based on the following scale, please indicate your knowledge of InfantSEE.

1 2 3 4 5
Strongly Disagree Disagree Neutral Agree Strongly Agree

1. Before attending this program, I had heard of the InfantSEE program.

1 2 3 4 5
SD D N A SA

2. Before attending this program, I understood what constituted an InfantSEE exam.

1 2 3 4 5
SD D N A SA

3. Before attending this program, I knew who performed InfantSEE exams.

1 2 3 4 5
SD D N A SA

4. Before attending this program, I have recommended InfantSEE to a patient.

1 2 3 4 5
SD D N A SA

5. After attending this program, I better understand the InfantSEE program.

1 2 3 4 5
SD D N A SA

6. After attending this program, I am likely to recommend InfantSEE to patients.

1 2 3 4 5
SD D N A SA

7. After attending this program, I would recommend the WInK program to a colleague.

1 2 3 4 5
SD D N A SA

Comments:
