

majority using the NEHEP materials as a key source of information. Also, many have participated in special promotions, offered free or low-cost eye examinations, and/or designed other programs and activities to promote eye health.

All respondents felt that their organizations had benefited in some way from being a member of the Partnership. Most felt that the scientific data and the material provided by the NEHEP have been most valuable. They also recognized the collaborative efforts of the Partnership as a catalyst, lending additional credibility to their individual efforts and heightening the awareness of major eye diseases. Other findings include the following:

- Those interviewed characterized the Partnership as a motivating force that encourages all target audiences, public and professional, to take notice of eye diseases as a serious health concern.
- Respondents felt that the Partnership serves as a catalyst that enables organizations to collaborate on health education programs.
- Respondents thought that sharing information with and increasing awareness among organizations outside the Partnership have empowered other organizations to create eye health education programs through partner activities and on their own.
- They also requested technical assistance on

program evaluation and recommended the Internet as an important new communication channel for NEHEP.

Educational Materials

In 1992, the NEHEP staff developed and disseminated three eye health education kits: the *Glaucoma Community Education Kit*, the *Educating People with Diabetes Kit*, and the *Information Kit for Pharmacists*. The first two kits were designed for health professionals, program planners, and others interested in promoting awareness about the importance of early detection and treatment of glaucoma and diabetic eye disease. The kit for pharmacists was specially designed to help pharmacists provide information to their patients with diabetes.

More recently, the NEHEP launched the *Ojo con su Visión* program for Hispanics with diabetes, including a booklet and radio, television, and print public service announcements. The Spanish-language materials were distributed to Hispanic media and to community organizations in October 1995 to help them create awareness of diabetic eye disease and the importance of regular eye examinations.

Key findings on the Partnership assessment of the education kits follow:

March 1991

Second National Eye Health Education Conference: Planning the Partnership determines roles for implementing the Program and reviews new materials.



- Overall, 76 percent of those interviewed found the three NEHEP education kits “very useful,” the top ranking in the scale provided, while the remaining 24 percent found them “somewhat useful.”
- Respondents gave the kits an average rating of 4.5 on a scale from 1 (poor) to 5 (excellent) in regard to the following characteristics: useful for the intended audience, visually appealing, scientifically accurate, easy to use, and overall quality.
- More than two-thirds of the respondents were pleased with the current materials and did not recommend changes. The remainder provided one or more minor suggestions to improve the materials.

Future Opportunities

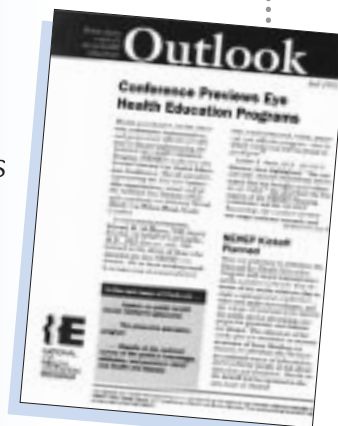
Nearly all respondents felt that the role of the Partnership should be to continue raising awareness about the early detection and treatment of eye diseases, not only for high-risk populations, but also for those in the general public who may not consider themselves at risk.

Nearly two-thirds of the respondents felt that their needs had been met by the Partnership. When they were asked how the Partnership could serve them better in the next 5 years, they made the following recommendations:

- The majority of the respondents would like the NEHEP to better facilitate collaboration and coalition building among health professionals and the Partnership as a whole by keeping everyone informed of activities and by fostering communication.
- Several respondents encouraged the NEHEP to continue developing patient education materials with new messages and updated statistics, guidelines, and medical advances in eye care. Suggestions included developing new materials on low vision and on age-related macular degeneration. Some respondents requested more audiovisual and Spanish-language materials, new materials specific to Native Americans, and interactive videos for the general public.
- Several members would like the NEHEP to help assess the effectiveness of various eye health education programs and share the findings with the Partnership.
- Some respondents recommended continuing to increase awareness and education among the public and professionals, especially looking to the electronic media as a mode of dissemination and participating in more conferences/ exhibits; focusing on low vision and older Americans; and addressing new issues related to the health care system such as encouraging collaboration with managed care organizations to finance eye examinations and screening.

November 1991

NEHEP develops and disseminates the first issue of *Outlook*, the Program's information bulletin.



December 1991

NEI formally launches the NEHEP at a press conference in Washington, DC, reaching, through extensive press coverage, an estimated 46 million Americans.



Customer Satisfaction With NEHEP Education Materials

Since the program began, more than 85,800 copies of the three NEHEP education kits—*Educating People with Diabetes Kit*, *Information Kit for Pharmacists*, and *Glaucoma Community Education Kit*—have been distributed. To assess customer satisfaction with these kits, the NEHEP surveyed health and outreach professionals who requested the kits in 1996 to ask about their current and planned use of the kits and how they rated the kits for quality.¹

A total of 448 respondents (19% of 1996 recipients) participated in the survey, some answering questions about two or even three kits:

- 201 for the *Educating People with Diabetes Kit*.
- 201 for the *Information Kit for Pharmacists*.
- 151 for the *Glaucoma Community Education Kit*.

Across the three surveys, findings were very similar. Respondents gave high ratings in terms of

usefulness and quality to the kits and to the individual items within each kit that they had used. Most respondents learned about the availability of the kits through newsletters and other professional media. They reported using the kits primarily for patient and community education purposes. Recommendations for improving the kits included adding color to the materials and simplifying the language in the brochures. The customer satisfaction surveys produced important customer-based data that show that the NEHEP materials are on target, serving the needs of health professionals and educators nationwide. Two important recommendations for new materials and outreach that resulted from the customer satisfaction surveys were:

- The continuing and expanded promotion of the *Ojo con su Visión* booklet to health professionals who serve the Hispanic communities.
- The planning, careful adaptation, and testing of materials for Native Americans on diabetic eye disease.

This type of survey can be effectively applied to future NEHEP kits and materials as well.

Pharmacist Assessment

The National Community Pharmacists Association, formerly “NARD,” is a NEHEP Partnership member. At the NARD Annual

¹The *Ojo con su Visión* booklet, introduced in 1995, was not included in this evaluation because it had not yet been disseminated to enough people to allow for a representative sample.



January 1992

NEHEP produces and distributes TV, radio, and print PSAs on glaucoma and print PSAs on diabetic eye disease.



April 1992

Three new eye health education kits are developed, produced, and distributed.



Convention in November 1996, the NEHEP sponsored an exhibit of its eye health education materials and invited pharmacists to participate in a 10-question assessment to help the NEHEP learn more about how pharmacists interact with their patients and identify pharmacists' needs concerning patient education. Ninety-five pharmacists completed the assessment.

Overall, key findings from the assessment show that pharmacists believe that:

- There is a need for patient education in the pharmacy setting.
- It is important for pharmacists to educate their patients with diabetes about diabetic eye disease.
- The *Information Kit for Pharmacists* can be an effective and useful patient education resource for pharmacists.

Pharmacists who were not aware of the NEHEP materials reported that they would request them and use them in the future. These findings will be used to help the NEHEP enhance the existing pharmacy program.

Public Service Announcements

The NEHEP conducted two public service announcement (PSA) campaigns for glaucoma and two for diabetic eye disease during its first 5 years. In 1992, the NEHEP launched the first glaucoma campaign with the TV spots "Images" and "Warning," live announcer radio scripts, and print ads. Another TV spot, "Grandpa," was released in 1994, and "Warning" was re-released the same year. The first diabetic eye disease print ad campaign was released in 1992. The *Ojo con su Visión* campaign on diabetic eye disease targeted to Hispanics included TV, radio, and print ads in Spanish and was launched in late 1995. The PSA campaigns were evaluated, and the results are reported below by type of media: television, radio, and print.

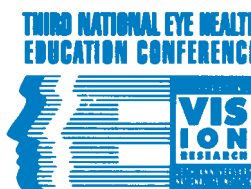


January 1993

Program materials—press kit, glaucoma poster, diabetic eye disease brochure, and NEHEP pocket folder—receive the National Association of Government Communicators Blue Pencil Award for excellence.

December 1993

Third National Eye Health Education Program Conference: provides partners with needed skills and current information as well as the opportunity for developing collaborative programs.



Television

In January 1992 and again in October 1994, television PSAs were released and monitored for 6 months. Two mechanisms were used to track television PSA usage: one reporting actual usage and the other reporting projected usage where actual data were unavailable (e.g., cable television).

In 1994, three times as many NEHEP PSAs were aired on network and cable television as in 1992, 78,000 versus 25,000, respectively. The increase was primarily due to the number of cable PSAs aired, which more than tripled during 1994. Estimated value of this air time on cable increased from \$300,000 to \$1.1 million.

In October 1995, the *Ojo con su Visión* television PSAs were released to Spanish-language television stations and monitored through mid-January 1996. Eighteen stations, including 4 ABC affiliates, 8 CBS affiliates, and 4 stations in the top 20 Hispanic markets, aired the Spanish-language PSAs. The distribution company reported the highest numbers of PSAs distributed and aired among all the Hispanic PSA campaigns they had ever measured. In addition, 154 cable stations aired the PSAs. Each station aired the PSA an average of 55 times, and the estimated broadcast air time value of the PSAs was \$22,376.

Radio

Projected usage of the glaucoma live announcer radio scripts distributed in 1992 and 1994 is estimated at 30,644 and 31,270 airings, respectively, for an estimated total of 61,914 airings and a total value of \$872,857. The estimate for 1994 may be less than actual usage because of problems with information collection pertaining to radio station identification.

The *Ojo con su Visión* Spanish-language radio PSAs including pre-recorded spots and live announcer scripts were released in September 1995 and monitored through February 1996. A total of 59 stations used the spots and scripts an average of 177 times per station for a total of 10,446 airings. Of the 59 stations, 24 were in the top 20 Hispanic markets. The estimated value of the advertisements was \$106,700.

Print

From January 1992 through December 1996, 1,323 PSA newspaper/magazine clippings on glaucoma, diabetic eye disease, and general advertisements for information kits were compiled. The total number of clips by year and by quarter varied, with no clear trends, except for a noticeable peak in 1995. This peak was attributed mostly to the glaucoma campaign, which coincided with the

October 1994

NEHEP releases its second Glaucoma TV PSA, "Grandpa."



November 1994

For National Diabetes Month, NEHEP and the American Diabetes Association join forces to focus attention and education efforts on diabetic eye disease.



distribution of a new glaucoma TV PSA campaign in late 1994 and remained high in 1996.

Print Media Coverage of Eye Health Information

Evaluation of newspaper and magazine coverage (other than PSAs) of eye health information covered the time period from January 1, 1991, through December 31, 1996, so that a year of media coverage prior to the start of the NEHEP could be used as the base year. Types of newspaper articles retrieved included announcements and articles about health fairs/free screenings, features, and columns/letters. These articles are not NEHEP related and reflect coverage of general eye health-related information on glaucoma and diabetic eye disease.

Overall, print media coverage of eye health information increased significantly during the 6 years, with coverage of glaucoma increasing threefold and coverage of diabetic eye disease increasing nearly five times. These increases indicate the growing importance given by the print media to prevention of blindness through the early detection of these two diseases.

One trend of interest was the growth in articles addressing managed care organizations and other health plans and their performance in terms of

regular eye examinations for people with diabetes. The first such articles appeared in 1993 and increased sixfold by 1996, a significant indicator of the attention given to this subject.

Data Sources for Measuring Trends in Eye Examinations

The NEHEP is an education program whose objective is to effect changes in awareness of eye health among the target audiences in order to encourage more at-risk people to obtain regular dilated eye examinations. Data on eye care practice changes are limited but increasingly available, promising to give the NEHEP better information in the future. From a review of currently available information, this evaluation identified two such data sources: The Behavioral Risk Factor Surveillance System and the Health Plan Employer Data Information Set.

October 1995

NEHEP launches the *Ojo Con Su Visión* outreach program to educate Hispanics about diabetic eye disease, eventually reaching 75 million people through a media campaign.



Behavioral Risk Factor Surveillance System (BRFSS) Data

Designed by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics, the BRFSS is a State-administered survey capturing health behavior data. In 1994, the BRFSS incorporated a diabetes module for the first time that allowed the identification of the proportion of survey respondents with diabetes who had received dilated eye exams within the year prior to each survey. According to the CDC, 22 of the States participating in the BRFSS implemented the diabetes module in 1994, with an increasing number of States implementing the module each year, bringing the total to 36 States in 1995 and 38 States in 1996.

Thus far, only the 1994 data have been made available for analysis. The number of respondents (2,124 people with diabetes) answering the question is a relatively small portion of the total number of respondents in the system (106,030). The results from the analysis of this rather small sample for selected demographic variables follow. Until the sample includes data from all the States, it cannot be considered representative of people with diabetes nationwide. Furthermore, the relatively small sample size in the 1994 data set limits subgroup analysis. A review of subgroup differences, however, may provide insights for future analysis of a larger sample.

BRFSS 1994 Data Findings

- 61 percent of the respondents reported having had their most recent dilated eye examination within the year prior to the survey, while 28 percent reported that it had been more than 1 year since their most recent dilated eye examination, and 7 percent reported never having had a dilated eye examination.
- As the respondents' age increased, the likelihood of having had an examination within the past year increased, with 67 percent of those over the age of 60 having had a dilated eye examination within the year prior to the survey versus only 45 percent of those 20 years and younger having had the same examination.
- A racial/ethnic breakdown of the data indicates that Hispanic respondents were slightly less likely than other races/ethnicities to have received a dilated eye examination within the past year (57 percent versus an average of 61 percent, respectively). Asian and Pacific Islanders (25 percent) and American Indian and Alaska Natives (13 percent) were more likely to have never had a dilated eye examination, compared with the average of 7 percent for all races/ethnicities.

The 1995 data only recently became available; these data will provide a base for documenting trends and conducting further analysis of information with a larger sample.

October 1995

The Vision Care Section of the American Public Health Association presents NEHEP with its "Outstanding Project Award," recognizing the Program's efforts to improve public health.



1995

NEI establishes the NEHEP Outstanding Achievement Awards to recognize Partnership organizations and their affiliates who demonstrate leadership and outstanding community programs in eye health.



Health Plan Employer Data Information Set (HEDIS) Data

HEDIS data identify eye care practices among a number of health maintenance organizations (HMOs). These data indicate the percentages of patients with Type 2 diabetes ages 32 to 64 who have received a diabetic retinal examination from an eye care professional. Data are currently available for 1995; however, the figures come from only 223 HMOs. The 1996 data, which were available in August 1997, include the same information on a wider sample (including HMOs, Medicaid, and Medicare) and will aid in the analysis of trends over time.

Conclusions and Implications

Various evaluation techniques were used to assess the success of the NEHEP and its Partnership over the past 5 years. This evaluation effort represents the first comprehensive look at determining how well the NEHEP Partnership has evolved over time and whether or not the NEHEP is meeting its objectives in disseminating information and materials and conducting media outreach to the public and at-risk audiences.

The 5-year evaluation clearly indicated that the NEHEP has been successful overall. All Partnership members surveyed reported that their organizations have benefited from participating in the

Partnership. In addition, most are pleased with the current materials. The evaluation revealed that an important future need is to expand the focus of the Partnership to include a public education program on low vision, with a specific focus on macular degeneration as a part of the campaign.

Health professional and educator satisfaction with the NEHEP education kits was overwhelming. In all cases, when respondents used specific materials in the kits, the majority considered the material “very useful,” the highest rating. Similarly, the respondents rated the quality of the materials close to “excellent” for all characteristics, including usefulness for the intended audience, visual appeal, scientific accuracy, and ease of use. The NEHEP’s selection of appropriate channels for promoting these kits is yielding dividends, as documented by the finding that written communications in professional outlets were the key source of information for learning about the kits.

This positive feedback from telephone interviews with a range of professionals parallels that obtained from pharmacists attending the NARD 1996 convention, who reported that they recognize the need for eye health education for people with diabetes and want to play a key role in this effort.

Newspaper and magazine coverage of eye health information on both glaucoma and diabetic eye disease has shown a steady and significant increase

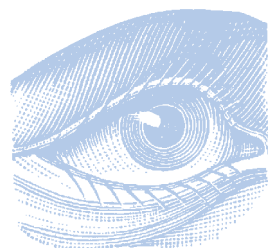
1996

The Ojo con su Visión TV PSA wins an award from the Charleston Film Festival, and Outlook wins an award from the Society for Technical Communication.



July 1996

On the horizon: The NEHEP identifies low vision as the next target area for eye health education efforts.



since 1991. Articles on managed care services related to diabetic eye disease also received increasing coverage in the print media over the time reviewed.

Television PSA airings on glaucoma increased threefold in 1994 when compared with 1992. A possible explanation for these increases could be the cumulative effect of eye health education campaigns in creating an interest in the PSAs among public service directors and the general public. It can also be concluded that the television and radio outreach on glaucoma is reaching media markets in almost all of the states, which is a key goal of any national program.

Ojo con su Visión, the public service campaign for Hispanics with diabetes, successfully reached all of the top 30 Hispanic media markets. Both television and radio PSA distribution and usage were high, and feedback from the Hispanic media outlets on the quality of the PSAs was excellent.

This evaluation also identified key secondary data sources for tracking the trends in the proportion of people with diabetes who obtain regular eye examinations. The BRFSS and HEDIS offer long-term opportunities to evaluate behavior change associated with increased knowledge about the importance of the early detection of diabetic eye disease.

In sum, the 5-year NEHEP evaluation not only

presented clear evidence that the Program and its Partnership are meeting their goals but also revealed opportunities to enhance their efforts in the future. Key implications from this evaluation include:

- Partnership member organizations want technical assistance in the form of a user-friendly kit or training on program evaluation techniques.
- They suggest exploring the use of the Internet as a key communication tool among organizations. In advance of this reported need, the NEI premiered its new Web site in March 1997, including extensive information about the NEHEP.
- They recommend exploring links with managed care organizations to expand outreach to shared at-risk audiences.
- They agree on the need for continuing to plan for and implement a low vision public education program.
- Recipients of the NEHEP education kits and Partnership members both suggest extending the promotion of the *Ojo con su Visión* booklet and media products to meet demand for effective, high-quality, Spanish-language materials.
- Recipients of the NEHEP education kits also recommended the development of eye health education materials targeted to Native Americans.

1996

The NEHEP Partnership reaches 51 public and private organizations, which work together to plan and implement eye health programs.



- A documented need emerged to step up efforts to increase awareness of NEHEP materials and programs among a key constituent group (specifically, pharmacists), who reportedly will order and use them.
- Additional media campaigns would be valuable to sustain and increase awareness about the early detection of glaucoma and diabetic eye disease among at-risk audiences, particularly to piggyback with and increase coverage during special promotions, such as National Diabetes Month, Glaucoma Awareness Month, and other calendar events.
- The National Eye Institute will continue to analyze and report trends in the proportion of eye examinations among people with diabetes from available data sources such as BRFSS and HEDIS.
- It has been determined that the evaluation methods used can be effectively repeated and replicated as time progresses and needs arise.

Administration on Aging, DHHS
 Alcon Laboratories, Inc.
 American Academy of Family Physicians
 American Academy of Ophthalmology
 American Academy of Optometry
 American Association of Diabetes Educators
 American Association of Retired Persons
 American Diabetes Association
 American Foundation for the Blind, Inc.
 American Medical Association
 American Optometric Association
 American Pharmaceutical Association
 American Society of Health System Pharmacists
 Association of Schools and Colleges of Optometry
 Association of State and Territorial Directors of Health Promotion and Public Health Education
 Centers for Disease Control and Prevention,
 Department of Health and Human Services
 Chi Eta Phi Sorority, Inc.
 Delta Gamma Foundation
 The Glaucoma Foundation
 Glaucoma Research Foundation
 Helen Keller International
 Hispanic Nurses Association, Houston Chapter
 Illinois Society for the Prevention of Blindness
 Indian Health Service, Department of Health and Human Services
 Joint Commission on Allied Health Personnel in Ophthalmology
 Juvenile Diabetes Foundation International
 The Lighthouse Inc.

Members of the NEHEP Partnership

The Links, Inc.

Lions Clubs International

Lions Eye Health Program

(Lions Clubs International Foundation)

Maryland Society for Sight

National Association for Parents of the Visually Impaired, Inc.

National Association for Visually Impaired

National Association of Area Agencies on Aging

National Association of Vision Professionals

National Black Nurses Association

The National Caucus and Center on Black Aged, Inc.

National Coalition of Hispanic Health and Human Services Organizations

National Community Pharmacists Association

National Council of La Raza

National Council on Patient Information and Education

National Council on the Aging, Inc.

National Institute of Diabetes and Digestive and Kidney Diseases, NIH

National Institute on Aging, NIH

National Medical Association

National Optometric Association

National Public Health Information Coalition

Office of Disease Prevention and Health Promotion,
Department of Health and Human Services

Office of Minority Health, DHHS

Prevent Blindness America

Prevention of Blindness Society of the Metropolitan Area

Research to Prevent Blindness

Veterans Health Administration, Department of
Veterans Affairs



NATIONAL INSTITUTES OF HEALTH

Building 31 Room 6A32
31 Center Drive MSC 2510
Bethesda MD 20892-2510
301-496-5248