

PREVENT BLINDNESS NORTH CAROLINA

4011 WestChase Blvd. Suite 225 Raleigh, NC 27607 919-755-5044

The Kenneth Royall Children's Vision Screening Improvement Program

And

The North Carolina Preschool Vision Screening Program

Report for Contract Year 2011-2012
and Planned Year 2012-2013

August 30, 2012

Part I: The Kenneth Royall Children's Vision Screening Improvement Program

A. Description of program activities of Prevent Blindness North Carolina.

The Kenneth Royall Children's Vision Screening Improvement Program is a public-private program of training and certification for school vision screeners offered to all of the state's 100 counties, led by Prevent Blindness North Carolina [PBNC] and the School Health Unit of the Children and Youth Branch of DHHS. School screenings are North Carolina's principle means of performing pediatric vision screenings.

B. Activities funded by 2011-2012 State contracts, contract amounts, and program narrative.

The program is funded by a \$419,000 State contract through DHHS. It offers training and certification for volunteer school vision screeners, as well as follow-up services.

Each three-hour training and certification workshop for local volunteer vision screeners includes instruction in the components of vision; the conditions that put children at risk for vision deficiencies; proper screening procedure, including standards, preparation, and techniques; resources available for low-income families and best practices in record-keeping, referral, and follow-up. Each includes a supervised practice session and a required demonstration of mastery of screening techniques by all participants. Certification is for two years.

PBNC's primary screening target is the state's 2022 elementary, middle, and charter schools.

C. Output data demonstrating the effects of the organization's activities.

The 2011-2012 training and certification workshops for vision screeners commenced on June 2, 2011 in Granville County and concluded on May 16, 2012 in Iredell County. During the 2011-2012 contract year, PBNC completed a total of 191 workshops and trained 3,341 vision screeners from 89 counties.

Combined with the 3,484 vision screeners PBNC trained from June 2010-May 2011, North Carolina had 6,825 total certified vision screeners during the two-year period, representing all 100 counties. (Because of constant turnover in the state's vision screening volunteers, certification is for a two-year period only. PBNC maintains a rolling two-year accounting of the total number of trained screeners. As of contract year 2011-2012, PBNC no longer includes the 3,285 screeners it trained in 2009-2010 in its total of current vision screeners.)

2011-2012 contract guidelines call for one certified screener for every 135 students in the target grades, or some 6,000 trained screeners for the state's K-6 population. These guidelines were exceeded with the state's 6,825 certified screeners at the close of the contract year.

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In the period encompassing contract years 2010-2011 and 2011-2012, PBNC held 379 vision-screening workshops with participants from all 100 North Carolina counties.

Table 1 shows participation in the 191 workshops PBNC conducted in contract year 2011-2012, by county.

County	# Screeners Trained
Alamance	8
Alexander	39
Alleghany	4
Anson	11
Ashe	17
Avery	2
Beaufort	25
Bertie	0
Bladen	0
Brunswick	25
Buncombe	201
Burke	12
Cabarrus	43
Caldwell	9
Camden	9
Carteret	18
Caswell	8
Catawba	37
Chatham	5
Cherokee	36
Chowan	0
Clay	27
Cleveland	42
Columbus	76
Craven	24
Cumberland	138
Currituck	53
Dare	8

County	# Screeners Trained
Jones	6
Lee	7
Lenoir	14
Lincoln	7
Macon	10
Madison	20
Martin	27
McDowell	22
Mecklenburg	60
Mitchell	15
Montgomery	44
Moore	0
Nash	20
New Hanover	21
Northampton	0
Onslow	66
Orange	14
Pamlico	16
Pasquotank	19
Pender	22
Perquimans	3
Person	7
Pitt	33
Polk	35
Randolph	84
Richmond	36
Robeson	3
Rockingham	26

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Davidson	54	Rowan	11
Davie	1	Rutherford	38
Duplin	0	Sampson	14
Durham	80	Scotland	0
Edgecombe	9	Stanly	48
Forsyth	166	Stokes	89
Franklin	9	Surry	2
Gaston	63	Swain	13
Gates	14	Transylvania	39
Graham	0	Tyrell	0
Granville	5	Union	86
Greene	21	Vance	7
Guilford	209	Wake	595
Halifax	18	Warren	15
Harnett	2	Washington	14
Haywood	1	Watauga	11
Henderson	40	Wayne	26
Hertford	2	Wilkes	10
Hoke	0	Wilson	0
Hyde	10	Yadkin	5
Iredell	48	Yancey	5
Jackson	32		
Johnston	15	All Counties	3341

TABLE 1: VISION SCREENERS CERTIFIED IN CONTRACT YEAR 2011-2012, BY COUNTY

The 3,339 participants in the training and certification workshops in 2011-2012 fell into occupational categories as shown in Table 2.

Teachers, TAs, Nurses, other school personnel	Volunteers and Students	Total
39%	61%	100%

TABLE 2: CERTIFIED VISION SCREENERS BY OCCUPATION, CONTRACT YEAR 2011-2012

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513,884 children were screened in North Carolina during the 2011-2012 school year, representing a number equivalent to 65% of the target population of 792,833 K-6th graders. Of those 513,884 screened, 39,999 were referred to eye care professionals, an 8% referral rate.

Table 3 displays the 2011-2012 screening and referral data that counties have reported to PBNC to date.

Counties	# Screened	# Referred	% Referred		Counties	# Screened	# Referred	% Referred
Alamance	9,898	1,034	10%		Jackson	810	50	6%
Alexander	1,801	103	6%		Johnston	10,289	981	10%
Alleghany	1,049	34	3%		Jones	297	55	19%
Anson	2,838	161	6%		Lee	8,455	449	5%
Ashe	1,032	51	5%		Lenoir	3,147	212	7%
Avery	1,387	71	5%		Lincoln	4,858	350	7%
Beaufort	1,877	275	15%		Macon	2,975	238	8%
Bertie	203	20	10%		Madison	1,760	53	3%
Bladen	1,730	231	13%		Martin	1,381	108	8%
Brunswick	3,923	285	7%		McDowell	2,475	218	9%
Buncombe	9,383	759	8%		Mecklenburg	64,760	5,285	8%
Asheville City	1,551	116	7%		Mitchell	337	10	3%
Burke	5,009	371	7%		Montgomery	1,167	190	16%
Cabarrus	8,890	753	8%		Moore	4,857	222	5%
Kannapolis City	1,690	154	9%		Nash	5,145	708	14%
Caldwell	1,465	193	13%		New Hanover	7,550	644	9%
Camden	1,058	86	8%		Northampton	920	91	10%
Carteret	4,823	100	2%		Onslow	8,763	667	8%
Caswell	1,234	117	9%		Camp Lejeune	0	0	0%
Catawba	10,427	710	7%		Orange	2,872	172	6%
Hickory City	1,700	136	8%		Chapel Hill- Carrboro	4,095	236	6%
Newton-Conover	1,286	124	10%		Pamlico	802	47	6%
Chatham	3,436	398	12%		Pasquotank	1,877	74	4%
Cherokee	1,698	100	6%		Pender	2,920	105	4%
Chowan	797	106	13%		Perquimans	705	46	7%
Clay	958	50	5%		Person	2,369	238	10%
Cleveland	6,755	293	4%		Pitt	6,047	662	11%
Columbus	2,474	219	9%		Polk	660	50	8%

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Whiteville City	919	82	9%
Craven	5,848	467	8%
Cumberland	19,805	1,300	7%
Ft. Bragg	2,841	0	0%
Currituck	938	51	5%
Dare	1,999	230	12%
Davidson	2,424	273	11%
Lexington City	1,115	148	13%
Thomasville City	1,143	64	6%
Davie	2,325	254	11%
Duplin	3,461	244	7%
Durham	2,792	344	12%
Edgecombe	2,314	189	8%
Forsyth	22,925	1,534	7%
Franklin	2,937	260	9%
Gaston	9,063	912	10%
Gates	866	38	4%
Graham	393	6	2%
Granville	1,999	78	4%
Greene	290	33	11%
Guilford	20,579	1,717	8%
Halifax	1,211	91	8%
Roanoke Rapids	1,939	75	4%
Weldon City	500	36	7%
Harnett	1,484	222	15%
Haywood	3,217	151	5%
Henderson	5,099	374	7%
Hertford	384	54	14%
Hoke	1,874	157	8%
Hyde	190	15	8%
Iredell	7,606	472	6%
Mooresville City	2,298	277	12%

Randolph	3,527	329	9%
Asheboro City	1,572	163	10%
Richmond	4,058	572	14%
Robeson	9,189	1,052	11%
Rockingham	7,519	430	6%
Rowan	7,207	355	5%
Rutherford	3,778	258	7%
Sampson	990	144	15%
Clinton City	571	78	14%
Scotland	1,924	84	4%
Stanly	4,156	293	7%
Stokes	2,615	155	6%
Surry	6,524	349	5%
Elkin City	800	32	4%
Mt. Airy City	918	53	6%
Swain	634	46	7%
Transylvania	2,344	122	5%
Tyrell	215	29	13%
Union	21,112	1,231	6%
Vance	1,658	159	10%
Wake	35,499	2,701	8%
Warren	654	77	12%
Washington	659	116	18%
Watauga	2,678	67	3%
Wayne	6,734	700	10%
Wilkes	5,584	457	8%
Wilson	1,774	325	18%
Yadkin	2,507	212	8%
Yancey	1,041	51	5%
All Counties	513,884	39,999	8%

TABLE 3: 2011-2012 SCREENING AND REFERRAL DATA REPORTED BY COUNTIES THROUGH MAY 31, 2012

School nurses, parents, and students across the state have expressed positive opinions of the program and have shared numerous success stories. Representative comments include the following:

Kayla, age 7, a 1st grader from Carl Furr Elementary was referred for a screening by her teacher. Kayla had glasses but lost them and could not receive another pair of glasses from Medicaid until June. She was reported as having trouble seeing in class which affected her performance. Funding for her new pair of glasses was received from the Healthy Eyes Eyeglass program through PBNC. Now that she is wearing glasses again, she is doing much better in class. Her teacher states that he has not seen her squinting and struggling to see the board.

Kay C., RN, Cabarrus Co. Schools

This is a wonderful resource to those children that do not have Medicaid. From most of my experience these children are the ones who would fall through the cracks and never get glasses without the funding through Prevent Blindness.

All the school nurses are very grateful to PBNC for the wonderful training and resources made available to our students. The trainings are excellent. Vision screenings are more accurate. It increases awareness about how accurate vision impacts academic success. Support from PBNC staff is excellent. Thank You!

Lucy K., RN, Alamance Co. Schools

We found a child in second grade with an undiagnosed lazy eye. She has been to Asheville to a specialist and hopefully will not require surgery.

Tammy C., RN, Ashe Co Schools

Jah'nila, age 7, is a third grader who was recommended to have a screening by her teacher. There was no family history of vision problems, yet she was prescribed glasses. She received her glasses through the help of a VSP voucher. Her teacher was very grateful to have her receive glasses and she has improved her work in class. Jah'nila was so excited to be able to see better and her teacher stated that the expression on her face when she came to school with her new glasses was priceless!

Denise N., RN, Bertie Co. Schools

As always, Prevent Blindness affords the opportunity to break down financial barriers to access vision services for children. Children who cannot see may not be able to learn at their best potential. This program is very valuable and has been a lifesaver for some of our families. It is such a pleasure to work with all the staff at Prevent Blindness North Carolina. Thank you for everything.

Shannon P., RN, Person Co. Schools

A first grade teacher reports improvement in academic work and more enthusiasm about learning in regards to students we have served. Another first grade teacher reports improvement academically and behavior wise. She is receiving positive comments from parents and Special Ed. teachers. Parent thanked me for checking vision due to change in prescription that parents were not aware of until vision screening.

Lisa K., RN, MSN, Burke Co. Schools

Emily, a 5th grader, was screened and found to need glasses. Her parents took her for an eye exam and received a pair of glasses. Now Emily reports, "The smart board was really blurry before and I could hardly see it. Now I can see it great."

Flo B., RN, Cabarrus Co. Schools

PBNC has a huge impact on our school system. Our HOSA students were trained and helped with the screening process. Without their help, we would have only screened 1st and 6th grades. The voucher program also helps our students get the glasses they need and it is a tremendous help. We are very thankful to have the PBNC training. It has helped us significantly to screen accurately and provide certified screeners.

Terri W., RN, Gates Co. Schools

PBNC is a great asset to the school health program because they are able to provide many needy children with eye exams and glasses that would not otherwise be able to get them. Many students do not have insurance or Medicaid to pay for these services. PBNC has convenient, friendly services for the families we serve. The PBNC training provides up-to-date screening guidelines, additional resources and supplies to school nurses.

Carol E., RN, Nash-Rocky Mount Schools

D. Additional activities in 2011-2012 merit mention.

Vision Resource Guide

Each year PBNC develops and distributes a Vision Resource Guide. The resource guide provides individuals, health departments, departments of social services and school system staff with a better understanding of the resources available for securing eye care for those in financial need throughout our state. PBNC mailed one vision resource guide to each North Carolina Health Department.

School Nurse Consultation

PBNC serves as the primary vision screening resource for school nurses and administrators across North Carolina. During the 2011-12 contract year, PBNC certification program staff conducted strategy meetings to assess and enhance existing school vision screening programs

in each North Carolina school district. PBNC additionally conducted 29 in-service vision screening certification workshops tailored for school nurses. The in-service certifications are designed to be more interactive and include discussion about vision screening processes as well as issues specific to administering successful school vision screening programs.

Vision Service Plan. Vision Service Plan (VSP) distributes vouchers redeemable for eye exams, glasses, and other products and services to Prevent Blindness America affiliates and other non-profit organizations. PBNC has integrated the extensive use of VSP vouchers into its system for providing follow-up services to families whose children have been diagnosed as needing professional eye care but cannot afford such care. During the 2011-2012 school year, PBNC issued 993 VSP vouchers to North Carolina children. The average value of each voucher was \$147, making the program value to North Carolina total almost \$146,000.

Donor Docs Program

Prevent Blindness North Carolina, with the support of the Early Childhood Vision Care Commission, introduced the Donor Docs Program in 2008 to mirror the eye care services previously funded through the state ECVC Program. Eye care professionals have the opportunity to provide their donated services to a large group of individuals to include children in preschool through 12th grade, as well as adults, referred through vision screenings. During the 2011-2012 year, 179 doctors volunteered to donate a total of 532 eye exams and 367 pairs of glasses. Vouchers were issued to 380 children and adults across the state.

Healthy Eyes Program

In 2010, Prevent Blindness launched the Healthy Eyes Eyeglass Program in collaboration with Luxottica. This program provides eye glasses for children and adults. During the 2011-2012 school year, 404 children and 148 adults were served through this program at an estimated value of \$59,000.

E. Planned objectives and activities for the 2012-2013 contract year.

PBNC's objective for 2012-2013 is to train more than 3,000 screeners using revised training manuals and materials. PBNC will invite volunteer screeners to attend local workshops throughout North Carolina. PBNC will provide participants with all of the charts and screening materials they will need to conduct screenings and record their results. PBNC will certify the trained screeners for two years when they have completed their workshops and demonstrated their mastery of the subject matter.

PBNC's objective for the 2012-2013 contract year is to provide sufficient recruitment services, training, coordination, support, and follow-up to produce a screening infrastructure in North Carolina that will screen a minimum of 504,869 children as well as maintain a statewide referral rate of approximately 7% ($\pm 3\%$).

Part II: The North Carolina Preschool Vision Screening Program

A. Description of program activities of Prevent Blindness North Carolina.

The North Carolina Preschool Vision Screening Program screens children using paid PBNC personnel and local healthcare professionals. The Preschool program serves children ages 2-5, including learning disabled children and children with language delays. The program uses photo-refractive screening technology.

The Preschool Program conducted screenings in 486 child care centers during the 2011-2012 contract year. Participating centers included Head Start centers, NC PreK sites, Title 1 PreK programs, and private childcare centers.

B. Activities funded by 2011-2012 State contracts, contract amounts, and program narrative.

The program is funded by a \$450,000 state contract through the School Health Unit of the Children and Youth Branch of DHHS. Like the Kenneth Royall Program, the Preschool Program is coordinated through the Division of Public Health of DHHS.

During the photo-refractive screening in childcare centers, a non-invasive photograph is taken of the child's eyes and is analyzed for possible vision problems, to include refractive errors such as nearsightedness and farsightedness, misalignment, astigmatism, and opacities such as cataracts. The primary purpose of the PBNC preschool vision screenings is to detect vision problems that can to amblyopia, a condition that will lead to permanent vision loss if not treated at an early age, preferably during the preschool years.

C. Output data demonstrating the effects of the organization's activities.

During the 2011-2012 contract year, which ended May 31, 2012, the Preschool Program operated in 29 counties and assisted the health department in one other. The program screened 24,184 children and referred 2,149 (9%) to eye care professionals. PBNC also distributed educational materials regarding the signs of possible vision problems to the parents/guardians of 27,522 children, as well as the center directors and teachers.

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Table 4 displays the screening totals for all counties served during 2011-2012.

County	# Centers	# Offered	# Screened	# Referred
Alamance	15	350	311	43
Brunswick	2	153	129	5
Buncombe	31	1559	1337	85
Burke	14	696	591	46
Caldwell	6	384	365	32
Chatham	10	355	320	36
Cumberland	59	3425	2888	254
Down East	10	84	615	74
Durham	22	1098	955	86
Forsyth	54	2786	2479	250
Franklin	4	84	84	14
Guilford	21	809	683	66
Harnett	4	112	106	14
Henderson	6	343	308	18
Johnston	42	1821	1500	127
Lee	2	119	103	10
Lenoir-Greene	3	237	228	28
Mecklenburg	36	3110	2588	253
New Hanover	38	2631	2263	190
Orange	15	405	332	47
Pender	4	192	168	9
Robeson	1	60	53	7
Rowan	1	64	55	11
Sampson	3	202	186	13
Stokes	1	62	47	9
Wake	75	5890	5052	382
Wilson	7	491	438	40
Total	486	27522	24184	2149
Total Centers	486			
Total Offered	27522			
Total Screened	24184			
Utilization Rate	88%			
Total Referred	2149			
Referral Rate	9.00%			

Table 4: 2011-2012 screening totals

PBNC utilized a portion of the program's funding to serve NC PreK, Head Start and Title 1 PreK students. 10,830 children were screened in 216 of these sites across the state. Many of these sites depend on PBNC to help fulfill the state's requirement for their students to receive vision screenings each year.

As of July 31, 2012 PBNC had completed follow-up with 70% of all referred children to determine confirmed care and necessary glasses or other treatment. Follow-up is ongoing and it is anticipated to reach 75% confirmed care by September 30, 2012. PBNC offers every child whom is screened and referred to an eye care professional, and whose family cannot afford to pay for professional services, free eye examinations, glasses, and other treatment.

Throughout the screening year PBNC distributed follow-up questionnaires to the participating childcare centers. Success story information was also requested from the parents of the referred children who were seen by eye care professionals and diagnosed as having vision problems. Below is just a small sample of the overwhelming support shown each year for the preschool program.

Words cannot express how grateful I am to your organization for the eye screening that you recently conducted at my daughter Vivian's daycare. Vivian is two years old and was diagnosed with far-sighted vision that is so poor, she is legally blind. However, I never suspected that she had a vision problem as there were no obvious indicators. Because of your screening and the recommendation you provided suggesting that she see an eye doctor, my daughter's vision problem will more than likely be corrected with glasses. I am beyond grateful for your organization's pro-active mission. The service you provide is not only necessary but is critical for young children. Therefore I am spreading the word about Prevent Blindness NC and the value of the free screenings you offer across the state.

Melissa, Vivian's mom, Forsyth County

Another good screening find. Keep up the good work!
Dr. Brian Jackson, Eye Care Associates

I am really grateful for this program because being able to see clearly is critical to learning and so many of our parents may not think to take their children to the eye doctor for an exam.
Center Director, Durham County

Talon has moderate astigmatism – he needed glasses; he loves them!! Thank you so much for what you all do!!!

Talon's mom, Pender County

A number of years ago a very serious tumor was discovered by your screening. The little girl was in danger of losing her sight. We thank the program and thank the screeners for their good work. We can't say enough about this wonderful program!

Center Director, New Hanover County

I am thankful for this test for the children's sake. I wish it could have been done when my sons were in daycare, for I did not know one son had eye problems until he began public school.

Center Director, Johnston County

Naomi was seen by an ophthalmologist in December and was prescribed glasses. She was diagnosed with amblyopia. She will begin patching as well. Thank you so much for providing such a wonderful service! I never would have guessed that she had a need for glasses because she only needs the prescription for one eye. Thank you!

Naomi's mom, Wake County

We have done this for several years. Each year we have had a wonderful experience. The staff is very efficient. The results have allowed parents to provide glasses and medical care early on for our Pre-K students."

Pre-K teacher, Sampson County

"Great experience! So glad you were able to provide these screenings. What a great resource for these young students!"

Jessica M., Preschool Director, Mecklenburg County

"The screening is wonderful!! Our children love it! Our parents are so grateful that you provide such a needed service to our center. Thank you so much!"

Renee S., Center Director, Guilford County

D. Planned objectives and activities for the 2012-2013 contract year.

PBNC's objective for 2012-2013 is to screen 24,000 children ages 2-5 in preschool settings to include NC PreK (formerly More @ Four), Head Start and Title 1 PreK classes as well as private childcare centers. Paid PBNC personnel and local healthcare professionals will complete the screenings. PBNC will maintain a referral rate between 6% and 9%.

Part III: The Combined Programs

In 2011-2012, PBNC secured \$538,342 in foundation support, corporate and professional in-kind contributions, and PBNC cash matching grants to help fund the Kenneth Royall and Preschool programs. That amount boosted the combined state funding of \$869,000 by more than 62%.