

Believing is Seeing

Wills Eye Hospital Community Health Needs Assessment

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I. REFERENCES

I. EXECUTIVE SUMMARY

Wills Eye Hospital is a non-profit specialty hospital in Philadelphia, Pennsylvania that is dedicated to improving vision health. Wills Eye Hospital provides a full range of ophthalmic sub-specialty services and is home of one of the few Eye Emergency Departments in the country. Founded in 1832, Wills Eye Hospital is the oldest eye hospital in the nation and played a vital role in pioneering advances in the prevention and treatment of eye diseases. Wills Eye's mission is to serve as a comprehensive center of ophthalmology and make eye care accessible and responsive to the needs of underserved children and adults in the local community.

The 2019 Wills Eye Hospital Community Health Needs Assessment (CHNA) was conducted to identify vision health issues in Philadelphia. To assess the unmet vision needs in Philadelphia, input was solicited from individuals with expertise in Philadelphia's public health issues and individuals from medically underserved, low-income, and minority populations in Philadelphia were surveyed. Data reported by the U.S. Consensus Bureau, 2017 and 2018 Health of the City reports from the Department of Public Health of Philadelphia, and 2017 and 2019 Philadelphia State of the City reports from the PEW Charitable Trusts were used to describe the geography and demographics of Philadelphia.

The following vision health needs of children and residents of underserved areas of Philadelphia were identified based on the results of this assessment in order of priority:

- 1. Low awareness of ocular diseases that cause vision loss such as diabetic retinopathy and age-related macular degeneration among adults in underserved areas
- 2. Pediatric vision screenings in children under 17 and low adherence to obtain glasses or follow-up with a pediatric ophthalmologist
- 3. A sustainable model for vision screenings and adherence to follow-up care in community centers in underserved areas

II. INTRODUCTION

A. Overview of Wills Eye Hospital

Wills Eye Hospital is a non-profit specialty hospital in Philadelphia, Pennsylvania that is devoted to vision and eye health. James Wills, Jr., a Quaker merchant, was instrumental in the founding of Wills Eye Hospital through his bequest of \$116, 000 to the City of Philadelphia to establish the "Wills Hospital for the Relief of the Indigent Blind and Lame" in 1832. The establishment of Wills Eye Hospital played a vital role in instituting ophthalmology as a distinct branch of medicine in the United States and pioneering advances in the prevention and treatment of eye diseases.

Today, Wills Eye Hospital's dedication to improving the vision health of all residents in Philadelphia and around the world stays true to its founder's vision. Wills Eye Hospital is composed of 140,000 square foot facility that houses inpatient beds, operating rooms, examination rooms, state of the art diagnostic testing facilities, an ophthalmic library, teaching facilities, research spaces and the Vickie and Jack Farber Vision Research Center. Wills Eye Hospital is recognized as one of the best eye hospitals in the United States according to the U.S. News and World Report's Best Hospitals, ranking #2 in 2015 through 2018 and #1 for ophthalmology residency programs in 2018. Wills Eye Hospital provides primary and subspecialty eye care including clinical expertise in cataracts, cornea, glaucoma, retinal disease, neuro-ophthalmology, oculoplastic surgery, ocular oncology, pediatric ophthalmology, and ocular pathology. The breadth of clinical expertise and surgical capabilities makes Wills Eye Hospital a worldwide referral center.

The governing body of Wills Eye Hospital is the Board of Directors of City Trusts, which was established in 1869 by Pennsylvania legislature to administer all funds left in trust to the City of Philadelphia, including the bequest from James Wills, Jr. Thus, Wills Eye Hospital's legal title is, "City of Philadelphia Trustee, acting by the City of Philadelphia, doing business as Wills Eye Hospital". The Wills Eye Committee of the Board of Directors of City Trusts is responsible for overseeing all matters relating to Wills Eye Hospital and works closely with the Executive Director and Ophthalmologist-in-Chief of Wills on all policy, organizational changes, and major operational matters.

B. Wills Eye Hospital's Mission

"Skill with Compassion", Wills Eye Hospital's long standing motto, represents the hospital's commitment to improve the quality of life for all persons affected by vision impairment and pathology in the community and around the world. Wills Eye's mission is to serve as a comprehensive center of ophthalmology and make eye care accessible and responsive to the needs of the community by:

• Providing excellent patient care to all of those in need

- Supporting our medical staff
- Educating healthcare professionals and the community
- Participating in medical research

For decades, Wills Eye Hospital has engaged the local community to identify eye health issues and implement strategies to address the needs of the community and provide eye care to underserved children and adults.

C. Purpose and Impact of the Community Health Needs Assessment

The goal of the Community Health Needs Assessment (CHNA) is to help hospitals improve or create new programs aimed at alleviating health care barriers in the communities they serve. Federal law mandates that all not-for-profit hospitals must conduct a CHNA every 3 years and adopt an Implementation Strategy that will address the most significant needs of their community.¹

The CHNA for each hospital must:¹

- Describe the community served by the hospital and how it was determined
- Explain the process and methods used to conduct the assessment including the sources used and how data was collected and analyzed
- Obtain input from persons who represent the broad interests in the community, including those with special knowledge of or expertise in public health
- Prioritize the community health needs identified in the CHNA
- Make the report widely available to the public

The priority areas identified in the CHNA conducted by Wills Eye Hospital in June 2016 were diabetic eye disease, glaucoma, vision and aging, and pediatric vision screenings. The following describes the Implementation Strategy Wills Eye Hospital adopted to address these unmet needs and outcomes.

FY2017 – FY2019 Wills Eye Hospital Implementation Strategy Overview and Results

Priority #1: Diabetes and Diabetic Retinopathy

Wills Eye Hospital designed a program to study the ability of remote telemedicine fundus photography to increase compliance with obtaining regular eye exams for diabetics. The goals of this program were to increase the awareness about diabetic eye disease among people with diabetes and conduct targeted outreach to health professionals, community health workers, and others working with people with diabetes.

Priority #1 Results:

- Completed beta testing of Wills Eye novel telemedicine software and new Zeiss hand-held camera technology.
- Staff at three community practice locations and four additional primary care offices were trained to conduct telemedicine eye screenings. Full operation to conduct eye screenings at these locations commenced in FY2018.
- Completed training and commenced full operation to conduct telemedicine screenings at eight community practice locations.
- Supported ten Law Enforcement Health Benefits (LEHB) group health screenings throughout the Philadelphia region screening the local police force. Wills Eye Telemedicine works close with the LEHB nurse practitioner ensuring persons identified with pathology understand the fundus imaging report outcome, follow-up recommendations and the importance of scheduling appointments with an ophthalmologist as recommended.
- Developed partnerships with health insurance companies to collaborate on providing tele retinal screenings to the diabetic population and collaborate on follow-up care ensuring that their diabetic patients understand their condition and the follow-up care they need to manage their vision. Also, a partnership with the Laboratory Corporation (LabCorp) of America to provide tele retinal screenings within LabCorp's Patient Service Centers.

Priority #2: Early Detection and Improved Management of Glaucoma

Wills Eye Hospital designed a 5-year research project addressing how to maximize opportunities and address access to vision care gaps in 10 federally qualified health centers and 7 Temple University primary care practices located in underserved areas of Philadelphia. This community-based, telemedicine study used fundus photography of the optic nerve and macula to increase early detection of previously undiagnosed glaucoma, other ocular disease and vision loss in high-risk populations.

Priority #2 Results:

• A total of 906 individuals gave consent and were screened for glaucoma with the fundus camera. During this first screening, 258 (28.5%) had a

suspicious optic nerve, 62 (6.8%) had ocular hypertension, 102 (11.3%) had diabetic retinopathy, and 68 (7.5%) had other retinal abnormalities.

- Fifteen of the participants had very high intraocular pressure and were sent directly to a community ophthalmologist.
- Following the initial eye screening, 536 participants were invited back to receive a full eye exam due to having an abnormal finding or unreadable image. Of the 347 participants that completed the full exam, 80.7% were diagnosed with an ocular condition.
- Participants who were diagnosed with an ocular condition were referred to a local ophthalmologist and 144 of the 347 participants adhered to the follow-up recommendation.

Priority #3: School District of Philadelphia Vision Screening

The Wills Eye Vision Screening Program for Children was established with the School District of Philadelphia to conduct in-school vision screenings for children in grades K-5, provide free glasses to children with refractive error, and help children with suspected non-refractive eye disease(s) to be evaluated by a pediatric ophthalmologist. The majority of the chosen schools are located in underserved areas of Philadelphia.

Priority #3 Results:

- From July 1, 2017 to May 10, 2019:
 - A total of 19,530 children were screened
 - 2,634 children needed and received two pairs of eyeglasses
 - Follow up care with an ophthalmologist was needed for 326 children and 151 of these children received follow up care at Wills Eye Hospital.

*No written comments regarding the FY2017 – FY2019 Implementation Strategy were received.

D. 2019 CHNA Process and Methods

The following process and sources were used to conduct the 2019 Wills Eye Hospital CHNA:

i. Identify and describe area and community served

Although patients come from around the world to see the ophthalmologists at Wills Eye Hospital, the primary service area is Philadelphia, Pennsylvania. Wills Eye Hospital is located in the Central District that is adjacent to several underserved areas and populations in Philadelphia. Information describing Philadelphia's area, population and demographics, and general health was obtained from data reported by the U.S. Consensus Bureau, 2017 and 2018 Health of the City reports from the Department of Public Health of Philadelphia, and 2017 and 2019 Philadelphia State of the City reports from the PEW Charitable Trusts.

ii. Assess the unmet vision needs in Philadelphia and the target populations

This assessment focused on the underserved areas and populations of Philadelphia in order to have the biggest impact on addressing unmet vision needs in the community. Persons who have broad interests and special knowledge of or expertise in Philadelphia's public health provided input on the underserved areas and populations in Philadelphia.

Rickie Brawer, PhD, MPH, MCHES, the Co-director of the Center for Urban Health and Assistant Professor of the Department of Family and Community Medicine at Thomas Jefferson University in Philadelphia PA, was consulted for the 2019 CHNA. The Jefferson Center of Urban Health's mission is to improve the health and wellbeing of all Philadelphia citizens by utilizing the resources of Thomas Jefferson University and Thomas Jefferson University Hospitals by partnering with community organizations and targeted neighborhoods. The Center has numerous programs including health screenings and prevention and educational programs with well over 4000 people attending their programs annually.²

Raynard Washington, PhD, MPH, Chief Epidemiologist of Philadelphia's Department of Public Health also provided insight for the 2019 CHNA. The Philadelphia Department of Public Health collects, analyzes and reports on Philadelphia's public health data in order to provide services, set polices, and enforce laws that protect and promotes the health of all Philadelphian residents.³

Additionally, Wills Eye Hospital partnered with **Public Citizens for Children and Youth (PCCY)** and the **Stephen Klein Wellness Center** to gain input on the unmet vision needs of targeted populations and areas in the city. PCCY is an organization that promotes the success of all children in Philadelphia by offering direct help and providing research to inform communities and government officials and advocate solutions to children's unmet needs (https://www.pccy.org).⁴

The Stephen Klein Wellness Center provides a safe, supportive environment to men, women and children who are currently or formally homeless and to the residents of the North Philadelphian community affected by poverty. The Center provides healthcare services and assists with obtaining medical insurance, housing and employment to those who are struggling financially.⁵

iii. Identify and prioritize vision health needs in Philadelphia

The vision health needs of children and residents of underserved areas of Philadelphia were identified based on the results of this assessment. Needs were prioritized based upon the resources available at Wills Eye Hospital.

III. IDENTIFICATION AND DESCRIPTION OF AREA AND COMMUNITY SERVED

Patients travel locally and from across the United States and other countries to be seen at Wills Eye Hospital. For the purpose of this report, Wills Eye Hospital's primary service area is Philadelphia, Pennsylvania.

A. Geographical Area

Philadelphia is the largest city in Pennsylvania and the sixth largest city in the United States.⁶ Philadelphia has an estimated population of 1,584,138 as of July 1, 2018, a 3.8% increase from the Official Census conducted in 2010.⁷



Figure 1. Philadelphia Zip Codes and Planning Districts. Source: Department of Public Health City of Philadelphia 2017 Health of the City, Philadelphia's Community Health Assessment p. 3 Wills Eye Hospital is located in the Central District, more commonly known as Center City, which is one of eighteen planning districts in Philadelphia (Figure 1).⁸ Each planning district is characterized by distinct geographical and economic factors, and social determinants of health. In addition to Central Philadelphia, the most heavily populated districts include South, West, and North (including lower and upper North) Philadelphia



Figure 2. 2017 Population Estimates by Philadelphia Planning Districts Source: Department of Public Health City of Philadelphia 2018 Health of the City, Philadelphia's Community Health Assessment p. 3

B. Population and Demographics

Philadelphia is among the oldest and most historic cities in the United States but demographically Philadelphia is a young city. The largest portion of Philadelphia's population is comprised of young adults between the ages of 25 to 29 (Figure 3).⁹ In 2017, it was estimated that 22% of Philadelphia's population was under the age of 18 and 12.9% were 65 or older.⁷ The number of females slightly outnumbered males with approximately 52.7% of the population identified as female (Figure 3).⁹



Figure 3. 2017 Population Estimates by Age Group Source: Department of Public Health City of Philadelphia 2018 Health of the City, Philadelphia's Community Health Assessment p. 3

Philadelphia is an ethnically diverse city with 41% of individuals identifying as non-Hispanic black, 35% as non-Hispanic white, 15% as Hispanic, 8% as Asian, and 2% as other (includes Naïve Hawaiian and other Pacific Islander, American Indian, Alaska Native, and individuals identifying as two or more races) (Figure 4).⁹



Figure 4. 2017 Philadelphia Population Estimates by Race/Ethnicity Source: Department of Public Health City of Philadelphia 2018 Health of the City, Philadelphia's Community Health Assessment p. 3

While Philadelphia is ethnically diverse, it remains a largely segregated city with one race or ethnic group representing 84 percent of the city's 372 residential census tracts.^{9,10} Individuals that identify themselves as Non-Hispanic white are the largest population in several Philadelphia districts including Northeast, Northwest and South Philadelphia. Non-Hispanic black is the most largely represented population in the West and North districts of Philadelphia whereas Hispanic/Latinos are concentrated in North Philadelphia and a high Asian population is localized in Central Philadelphia (Figure 5).¹⁰



Figure 5. Racial and Ethnic Distributions by Philadelphia Planning District Source: PEW Charitable Trusts Philadelphia 2017 State of the City Report p. 9; used with written permission

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C. Chronic Health Conditions

Although overall mortality of Philadelphia residents has slightly decreased in 2017, the life expectancy has worsened for certain race/ethnic groups.⁹ Overall, Non-Hispanic Asians have the highest life expectancy with an average of 88.2 years for males and 98 years for females. Non-Hispanic black males have the lowest life expectancy with an average of 69.1 years.⁹

In 2017, the leading cause of death in Philadelphia was heart disease followed closely by cancer.⁹ Other leading causes of death related to chronic health conditions included cerebrovascular disease, chronic respiratory disease, diabetes mellitus and chronic kidney disease (Figure 6).⁹



Figure 6. 2017 Leading Causes of Death in Philadelphia Source: Department of Public Health City of Philadelphia 2018 Health of the City, Philadelphia's Community Health Assessment p. 5

Many of these chronic health conditions are associated with a significant reduction in quality of life. Self-reported health status is one metric to measure quality of life and 22% of Philadelphian residents rated their health as poor or fair. Hispanics had the highest self-reporting for poor or fair health at 36.2% followed by Non-Hispanic blacks at 25.2%.⁹

Additionally, the prevalence of obesity, a risk factor for many chronic health conditions such as cardiovascular disease and diabetes, has increased in 2017 with 21.9% of children and 35% of adults defined as obese. The rate of adult obesity and diabetes is highest among non-Hispanic blacks and Hispanics. In childhood obesity, the most at risk population are non-Hispanic black females and both male and female Hispanics.⁹

D. Insurance Coverage and Cost of Care

The rate of uninsured Philadelphian adults has significantly decreased with 9.7% adults being uninsured in 2017 compared to 12.0% in 2016. Even though the rates have decreased, Hispanic adults have the highest uninsured rate at 20.1% compared to whites, black and Asians at 8.0%, 9.9% and 9.6%, respectively.⁹ Subsequently, the percent of adults avoiding health care due to cost has also decreased to 13% in 2017 compared to 16% in 2016. Rates of uninsured children in Philadelphia are lower than the national average with only 3.6% being uninsured.⁹

E. Social and Economic Determinants

Low income and poverty has a significant role in many of the racial/ethnic health disparities in Philadelphia as areas with the highest rates of unemployment and poverty correspond with lowest access to clinical services and healthy lifestyle choices. Unemployment rates in Philadelphia have declined to 6.2% however this is still higher than national average (Figure 7).⁹ While the poverty rate is improving, 25.7% of Philadelphians live in a household with an income below the federal poverty level.⁹





Despite decreases in unemployment rates and improving poverty levels, Philadelphia's poverty rate is still much higher than the national average at 13.4% and is the highest among the nation's 10 largest cities.¹¹ The highest poverty rates are localized to the North and West Districts of Philadelphia with over 45% of individuals living below the poverty line in 2018 (Figure 8).¹¹ The highest rates of poverty among the different racial/ethnic groups are among the Hispanics (38%) and Non-Hispanic blacks (27%). In



2018, 32% of children, regardless of race, were living in households below the federal poverty level.¹¹

Figure 8. Percentage of Residents Living Under the Federal Poverty Line by Philadelphia Planning District

Source: Source: PEW Charitable Trusts Philadelphia 2019 State of the City Report p. 84; used with written permission

IV. ASSESMENT OF UNMET VISION NEEDS IN PHILADELPHIA

This assessment only focuses on unmet vision needs in Philadelphia, as Wills Eye Hospital is a dedicated facility for treating patients with vision issues and/or ocular pathologies. Input from public health experts and officials knowledgeable in the health status of Philadelphia and members of medically underserved, low income, and minority populations in Philadelphia was requested to aid in assessing the community for unmet vision needs.

A. Input from individuals with expertise in Philadelphia's public health issues

In order to gain insight on the health needs of Philadelphia, advice was solicited from Rickie Brawer, PhD, MPH, MCHES, the Co-director of the Center for Urban Health and Assistant Professor of the Department of Family and Community Medicine at Thomas Jefferson University in Philadelphia PA and Raynard Washington, PhD, MPH, Chief Epidemiologist of Philadelphia's Department of Public Health. Both Dr. Brawer and Dr. Washington gave important insight into the communities and populations with the greatest health care barriers. These populations include adults and children in the immigrant and non-English speaking communities and low income and homeless populations. Their recommendations were to reach out to the adults and children of these communities, particularly in the area of North Philadelphia, to obtain insight on the biggest concern(s) or need(s) related to vision health.

While several Community Health Needs Assessments from various organization are conducted and include an assessment of the health of the city, most do not assess the need for vision health and eye care. Many health assessments focus on life-threatening diseases such as heart disease, diabetes, and cancer and ways to implement preventative measures. Thus, focusing on vision needs fills an important gap assessing the health status in Philadelphia.

B. Input from Medically Underserved, Low-Income, and Minority Populations in Philadelphia

To assess the unmet vision needs of adults and children in the immigrant and non-English speaking communities and low income and homeless populations, individuals from the Stephen Klein Wellness Center and participants from the Annual Give Kids Sight Day were surveyed.

i. Collaboration with the Stephen Klein Wellness Center

The Stephen Klein Wellness Center is located in North Philadelphia and dedicated to providing health care services including medical and psychiatric care as well as individual, group or legal counseling to men, women and children who are currently or formally homeless. They also provide these services to the residents of the North Philadelphia community. Currently, the Center does not provide vision screenings. The Vickie and Jack Farber Vision Research Center at Wills Eye has partnered with the Stephen Klein Wellness Center to assess the vision needs of the individuals who utilize the Center. Individuals who agreed to participate were given a questionnaire that assessed patient attitudes towards eye exams, knowledge of common eye conditions and pathologies, and the importance of vision compared to other diseases or conditions. Data on 73 participants were collected from March 20, 2019 through April 23, 2019. The responses to the following questions were analyzed:

- Have you ever seen an eye doctor?
- When was the last time you had an eye exam?
- Have you ever heard of the following eye conditions; diabetic retinopathy, age-related macular degeneration, myopia, cataracts, or glaucoma?
- Has a doctor ever told you that you have any of the following eye conditions; diabetic retinopathy, age-related macular degeneration, myopia, cataracts, or glaucoma?
- Which of the following would concern you most as a consequence of losing your vision; independence, quality of life, productivity, other, or not sure?
- Which of the following diseases or ailments is the worst that could happen to you; Alzheimer's disease, cancer, blindness, HIV/AIDS, not sure?

The highest represented race surveyed was black or African American at 84.9%, followed by 6.8% other/don't know, 4.1% white, 2.7% Asian, 1.4% American Indian or Native Alaskan, and 9.6% Hispanic. Out of the 73 participants surveyed, 91.8% had ever seen an eye doctor, 68.7% had seen an eye doctor in the past 1-5 years and 31.3% over 5 years ago (Table 1).

Question		n	%
Have you ever seen an eye doctor?	Yes	67	91.8
	No	6	8.2
When was the last time you had an eye	1-5 years	46	68.7
exam?	>5 years	21	31.3

Table 1. Eye Exam History of Participants at the Stephen Klein Wellness Center

Participants were also surveyed about their knowledge of eye conditions. Most participants have heard of cataracts, glaucoma and myopia whereas diabetic retinopathy and age-related macular degeneration were not as well-known (Table 2). Since the rates of adult obesity and diabetes has increased in Philadelphia, particularly in Hispanic and Non-Hispanic black populations⁹, the awareness of diabetic retinopathy needs to be increased. Diabetic retinopathy is the most common cause of vision loss among diabetics.¹² Similarly, an increase in awareness to age-related macular degeneration would be beneficial in this population as it is the leading cause of severe vision loss in adults over 50.¹³ Both diabetic retinopathy and age-related macular degeneration cannot be cured but can be treated to help preserve vision. Better treatment outcomes are achieved when the diseases are caught in the early stages however symptoms usually appear once the disease progresses into the later stages.^{12,13} Thus, American Academy of Ophthalmology recommends regular eye exams for all adults to identify and track changes in the eye.¹⁴

Question	Eye Condition	n	%
Have you ever heard of any	Diabetic retinopathy	23	31.5
of the following eye conditions?	Age-related macular degeneration	17	23.3
n= number of participant that	Myopia (near-sightedness)	55	75.3
answered yes	Cataracts	66	90.4
	Glaucoma	63	86.3
Has a doctor ever told you that	Diabetic retinopathy	0	0.0
eye conditions?	Age-related macular degeneration	0	0.0
n= number of participant that answered 'ves'	Myopia (near-sightedness)	5	6.8
,	Cataracts	7	9.6
	Glaucoma	3	4.1

Table 2. Awareness and Prevalence of Common Ocular Pathologies

The biggest concerns of losing vision were decreased independence (37%), lower quality of life (20.5%), or they weren't sure (39.7%) (Table 3). When asked which of the following disease or ailments is the worst that they could imagine happening to them, 32.9% said that they weren't sure. When compared with life-threatening diseases, being blind tied with HIV/AIDS at 15.1% and was slightly lower than Alzheimer's disease

(19.2%) and cancer (17.8%) (Table 3). While blindness was not the top medical concern these data suggest that idea of losing one's vision is just as bad as being diagnosed with a life-threating disease in the population surveyed.

Question		n	%
Which of the following would concern you	Not sure	29	39.7
most as a consequence of losing your vision?	Independence	27	37.0
	Quality of life	15	20.5
	Productivity	1	1.4
	Other	1	1.4
Which of the following diseases or ailments is the worst that could happen to you?	Not sure	24	32.9
	Alzheimer's disease	14	19.2
	Cancer	13	17.8
	Blindness	11	15.1
	HIV/AIDS	11	15.1

Table 3. Major Concerns of Vision Loss and Ranking Among Other Life-Threating Diseases or Conditions

ii. Collaboration with Public Citizens for Children and Youth

Wills Eye Hospital partnered with the Public Citizens for Children and Youth (PCCY), the Eagles Charitable Foundation and Essilor Vision Foundation for the annual Give Kids Sight Day. Give Kids Sight Day provides free eye care and glasses to children 17 years and under living in Philadelphia and the surrounding suburbs. While vision screenings are performed on many children in the Philadelphia school system, many children who fail the screenings do not follow up with an ophthalmologist.⁴ This is particularly problematic for children who need glasses, potentially leading to problems in school, or have an ocular condition or pathology that needs treatment before having a permanent effect on vision. The most recent Give Kids Sight Day was held on November 17, 2018 and serviced 1,013 children with the volunteered efforts from the PCCY staff, Wills Eye ophthalmologists, optometrists and staff, and community members.

In addition to providing vision services, Give Kids Sight Day participants were surveyed on insurance coverage, primary language spoken at home and the main reason(s) for attending the event. **Colleen McCauley, RN, BSN, MPH, Health Policy Director at PCCY,** provided the 2018 outcome summary and survey responses to be included in this report.

The majority of the children screened at Give Kids Sight Day were from Philadelphia (79%) and the remaining children were from the Philadelphian suburbs including Delaware County, Montgomery County, Chester County, and Bucks County. Of the 1,013 children screened, 61% of the children needed a prescription for glasses and 11% were identified as having serious ocular issues and required a follow-up visit with a pediatric ophthalmologist at Wills Eye Hospital.

In 2018, 23% of the participants were uninsured, a trend that has remained steady since 2016 (Figure 9).



Figure 9. Percentage of Children Uninsured at Give Kids Sight Day 2012-2018

The percentage of children on Medical Assistance decreased compared to previous years (Figure 10). Of the 35% on Medical Assistance, only 31% of the parents said that Medical Assistance did not cover or did not know if Medical Assistance covered vision care. However, 65% of these parents were unaware that Medical Assistance covered unlimited replacement eyeglasses.

The percentage of children on Children's Health Insurance Program (CHIP) was the highest recorded since 2012 (Figure 11). Similar to parents of children on Medical Assistance, 35% of the parents of children on CHIP said CHIP did not cover or did not know if CHIP covered vision care and only 27% of these parents were aware that CHIP offers one replacement pair of glasses. Therefore, even though the majority of parents were aware that Medical Assistance or CHIP covers vision care for their child, many were not aware that replacement glasses were also covered.



Figure 10. Percentage of Children at Give Kids Sight Day on Medical Assistance 2012-2018



Figure 11. Percentage of Children at Give Kids Sight Day on CHIP 2012-2018

In 2018, the majority of participants only spoke English at home (64%) and the remaining 36% spoke another language other than or in addition to English. The most commonly spoken language other than English was Spanish followed by Mandarin, Chinese and Indonesian. A greater number of immigrant children were uninsured compared to non-immigrant children with 34% of non-English or English plus another language children uninsured compared to 16% uninsured English speaking only children.

The parents of the children in attendance at 2018 Give Kids Sight Day were surveyed on the reasons for attending the event. Parents had the ability to select as many reasons as applicable. A large majority attended Give Kids Sight Day for their children to receive a free exam and glasses with over 600 votes for each. Another main reason for attending the event was that one or more of their children failed a vision screening at another location such as their school (281 votes). Other popular reasons for attendance included being uninsured, their child is having trouble reading, having multiple children that can be screened in one day, and that the event is held on a Saturday.

V. IDENTIFY AND PRIORITIZE PHILADELPHIA'S VISION HEALTH NEEDS

Since Wills Eye Hospital is a dedicated eye hospital, only health needs pertaining to vision health were assessed and identified. The needs were prioritized based on the resources and programs that are currently established at Wills Eye Hospital making possible interventions more feasible and effective.

The following are vision health needs identified from the 2019 assessment in order of priority:

- 4. Low awareness of ocular diseases that cause vision loss such as diabetic retinopathy and age-related macular degeneration among adults in underserved areas
- 5. Pediatric vision screenings in children under 17 and low adherence to obtain glasses or follow-up with a pediatric ophthalmologist
- 6. A sustainable model for vision screenings and adherence to follow-up care in community centers in underserved areas

These priorities will be the focus areas for the FY2020 – FY2023 Implementation Plan (to be published November 2019). Potential interventions that may address the identified vision health needs are as follows:

Priority #1: Low awareness of ocular diseases that cause vision loss such as diabetic retinopathy and age-related macular degeneration among adults in underserved areas

- Partner with community centers or other community outreach organizations that have diabetes management classes and have a retina specialist be a guest speaker to provide information on diabetic retinopathy and the importance of regular screenings.
- Partner with senior living programs and facilities to spread awareness of agerelated macular degeneration and the importance of regular eye exams.
- Continue to train staff at community practice locations, primary care offices, and other locations on how to conduct telemedicine eye screenings with the hand-held camera technology in order to increase the number of people being screened for ocular pathologies.

Priority #2: Pediatric vision screenings in children under 17 and low adherence to obtain glasses or follow-up with a pediatric ophthalmologist

• Continue the Wills Eye Vision Screening Program for Children to screen school-age children

- Raise awareness among schools and parents that children's eye glasses and replacement glasses are covered by most insurances
- Work to increase adherence to follow-up with a pediatric ophthalmologist for abnormal findings or if the child needs glasses
- Increase awareness of the Annual Give Kids Sight Day

Priority #3: A sustainable model for vision screenings and adherence to follow-up care in community centers in underserved areas

- Develop a vison screening model that:
 - Can be Integrated into routine care provided by community centers or primary care offices in underserved areas of Philadelphia
 - o Is cost-effective and sustainable
 - o Ensures adherence to follow-up for failed screenings

VI. REFERENCES

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