The FY2020 – FY2023 Implementation Plan will focus on the following vision health needs identified from the Community Health Needs Assessment conducted in 2019 (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

**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**

Performing annual eye screenings allows for the monitoring, detection and management of sight threatening eye diseases such as diabetic retinopathy and age-related macular degeneration. Telemedicine eye screenings involves fundus imaging (photo of the back of the eye) that shows the microvasculature and the health surrounding the optical nerve and macula (posterior pole), which could show signs of eye disease and health issues such as diabetic retinopathy, hypertension, macular degeneration, glaucoma, cardiovascular disease, thyroid disease, and cancer/tumors. Early detection and timely treatment of eye disease can often delay or prevent severe vision loss. Telemedicine fundus eye screenings provides a level of eye care for populations with high prevalence of disease, and allows for the identification and prompt referral of individuals for evaluation and management of their eye health.

To bring awareness of ocular diseases that cause vision loss, *Wills Eye Telemedicine* aims to reduce barriers and increase eye health awareness to patients by providing fundus eye screening services. Telemedicine diabetic retinopathy eye screenings is a proactive approach that supports global and nationwide efforts to reduce costs and improve care management of persons with diabetes. Diabetic retinopathy is one of the leading causes of blindness in the United States and early detection and annual undilated fundus examinations are recommended to preserve vision and prevent blindness. Diabetic African Americans and Hispanic/Latinos are at a higher risk to develop diabetic retinopathy and both populations share several barriers in receiving adequate medical care.
Eye health care is not only a consideration for people with diabetes but for populations that are in rural and underserved areas with limited health care access and for populations vulnerable to eye disease due to the conditions of their current life situation of having addictions, a low-income status or are homeless. Many in this setting have disparities that without the help of dedicated services would most likely result in having a higher level of health issues with frequent ER visits and healthcare issues that require treatment at a higher cost. *Wills Eye Telemedicine* is working with partners on creating rural, national and international telemedicine collaborations to support regions with lower socioeconomic status, lower healthcare scores, and barriers to care.

**Specific Goals addressing Priority #1 for FY2020:**

Efforts will be made for *Wills Eye Telemedicine* to develop the following partnerships to provide fundus photo screening services and supporting follow-up care.

- Continue to build collaborative relationship with Independence Blue Cross and LabCorp to implement tele retinal screenings for diabetic patients at LabCorp patient care centers.
- Provide and expand screening services with Keystone First, Pennsylvania’s largest Medicare Assistance managed health care plan.
- Work with the Vickie and Jack Farber Vision Research Center at Wills Eye to develop a model of eye care for the homeless and very low-income population in Philadelphia.
- Collaborate with rural hospitals to provide service in primary care physician offices.
- Collaborate with Wills Eye Global Ophthalmology to develop tele retinal screenings globally.

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

*Wills Eye Vision Screening Program for Children*

The *Wills Eye Vision Screening Program for Children* was established in partnership with the School District of Philadelphia to help conduct in-school vision screenings for children in grades K-5, provide free glasses to children with refractive error, help children with suspected non-refractive eye disease(s) to be evaluated by a pediatric ophthalmologist and provide vision screening trainings for school nurses. Additionally, The *Wills Eye Vision Screening Program for Children* conducts summer vision screenings at Boys and Girls Clubs of Philadelphia and Chester, PA and children receive free glasses before returning to school in the fall. The *Wills Eye Vision Screening Program for Children* team consists of a pediatric ophthalmologist, project director, project manager, optometrist, vision screeners, optician, and social worker. A school nurse coordinator is appointed by the School District of Philadelphia to select the schools each semester, attend screenings, and manage parental/guardian consent form return. The majority
of chosen schools are in underserved areas of Philadelphia. The *Wills Eye Vision Screening Program for Children* also works closely with the school nurses, teachers, school staff and parents to educate about the importance of vision screening, glasses and follow-up care for their children.

**Give Kids Sight Day 2019**

Give Kids Sight Day provides free eye care and glasses to children 17 years and under living in Philadelphia and the surrounding suburbs. Additionally, pediatric ophthalmologists are present to provide immediate care if non-refractive eye disease(s) is suspected. The child and family will work with a social worker to set up follow-up visits with the pediatric ophthalmologist if non-refractive eye disease is confirmed. The annual Give Kids Sight Day will be presented by Wills Eye Hospital, Essilor Vision Foundation, Vision to Learn, Eagles Charitable Foundation, Jefferson Health, The School District of Philadelphia, and Public Citizens for Children and Youth (PCCY) and will be held on October 5, 2019.

**Specific Goals addressing Priority #2 for FY2020:**

**Wills Eye Vision Screening Program for Children**

- Visit **10-15** Boys & Girls Clubs/Summer Reading Programs in the Philadelphia area during Summer 2019
- Visit **30** Philadelphia Schools in the 2019-20 School Year that are geographically close to Wills Eye Hospital to help improve follow up care rates at Wills Eye.
- Develop a comprehensive training program to educate school nurses on the most efficient method to screen their students and educate parents on the importance of any needed follow up care.
- Conduct hands-on “School Nurse Trainings” throughout the 2019-20 school year.

**Give Kids Sight Day 2019**

The Annual Give Kids Sight Day will be held on October 5, 2019. Efforts will be made to spread awareness about Give Kids Sight Day to maximize participation including:

- Advertising on multiple websites including [https://www.PCCY.org](https://www.PCCY.org), [https://www.willseye.org/give-kids-sight-day/](https://www.willseye.org/give-kids-sight-day/), and local elementary school websites.
- Display on Social media - including Facebook and Twitter.
- Send out postcards in several languages to the Philadelphia Area.
- Distribute flyers in different languages to schools in Philadelphia and surrounding suburbs.
**Priority #3: A sustainable model for vision screenings and adherence to follow-up care in community centers in underserved areas**

The World Health Organization estimates that 285 million persons have poor vision worldwide, of whom 39 million are blind. Approximately 80% of vision impairment is estimated to be avoidable through treatment or prevention. Annual vision screenings can help detect many sight-threatening conditions such as uncorrected refractive error, cataracts, glaucoma, diabetic retinopathy, and age-related macular degeneration, however many individuals at highest risk of these sight-threatening conditions are in underserved communities with limited access to eye care services. In order to have a valuable impact on the eye health of the patient, a vision screening program needs to be sustainable and have a high adherence to follow-up care if pathology is detected.

To develop a sustainable model for vision screenings and adherence to follow-up care, a partnership between the Vickie and Jack Farber Vision Research Center at Wills Eye and the Stephen Klein Wellness Center was established to work towards the goal of eliminating correctable and avoidable vision impairment, and achieving eye and vision health equity in an at risk, underserved population. 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 formerly homeless. They also provide these services to the residents of the North Philadelphia community. The vision screening model should be efficiently integrated into the routine care provided to clients of the Stephen Klein Wellness Center.

**Specific Goals to address Priority #3 for FY2020:**

To begin to understand the specific needs of the community the Stephen Klein Wellness Center serves and a vision screening model that would work in this setting, pilot study will be conducted in order to:

- Implement a rapid vision/eye health screening protocol (*visual acuity and fundus photography*) to detect vision impairment and significant eye pathology and facilitate follow-up evaluation and appropriate care.
- Assess feasibility and determine constraints of incorporating a vision screening program into a community center with established health care services.
- Estimate the prevalence and reasons for vision impairment in this community.
- Evaluate knowledge, attitudes and beliefs about vision and eye care in this community to identify potential barriers to obtaining the necessary care and develop strategies to address them.