211 West Wacker Drive   toll free 800.331.2020
Suite 1700   local 312.363.6001   PreventBlindness.org
Chicago, Illinois 60606   fax 312.363.6052

December 20, 2019

Mr. Ed Simcox, Chief Technology Officer
U.S. Department of Health and Human Services
200 Independence Avenue, S.W.
Humphrey Building
Washington, DC 20201

RE: **Prevention X Request for Information**

Dear Mr. Simcox:

On behalf of Prevent Blindness and the millions of people of all ages whom we represent across the country who live with low vision, vision impairment, and vision-related eye diseases, we appreciate the opportunity to respond to the U.S. Department of Health and Human Services Request for Information regarding the Prevention X initiative. We look forward to working with HHS as it continues engaging patients in defining high-value, high-quality care and defining outcomes that matter to patients.

Introduction

Prevent Blindness is the nation's leading nonprofit, voluntary organization committed to preventing blindness and preserving sight. Prevent Blindness is primarily a public health organization. We strive to improve our nation's vision and eye health by enhancing state and community capacities through our core competencies of early detection, improved access to eye care, patient support, care coordination, public policy, research, advocacy, public awareness, and health education. As well, protecting and expanding access to sight-saving care is our priority for patients across the age continuum.

As part of Secretary Azar's Value-Based Transformation Initiative, HHS is soliciting feedback from stakeholders on strategies to scale and deploy prevention strategies in order to achieve a national healthcare system that improves patient outcomes. We applaud HHS's efforts to integrate prevention into healthcare as a strategy to improve the value of our national healthcare system. Prevention and early detection is a key strategy in preventing avoidable vision loss. **The reality is that 75% of incidents of avoidable vision loss are preventable and treatable through early detection, intervention, and health promotion efforts as well as through improved access to quality eye care; and yet, vision remains absent from numerous conversations pertaining to quality, access, cost, and equity.** These best practices of a true prevention strategy align naturally with the stated goals of HHS policy: to lower costs, improve quality and outcomes, and empower patients. It is the goal of Prevent Blindness to aim federal policy efforts toward achieving a reversal in the national prevalence of vision problems, saving both sight and dollars for federal and state governments as well as individuals and private institutions. We look forward to working with HHS toward these goals and improving our national vision and eye health.

Our National Vision and Eye Health Problem

Attention to vision and eye health is critical at all stages in life: from early in life as a part of healthy childhood development, for those in their working years, and for older adults as they seek to maintain independence and a high quality of life through the aging process. Vision and eye health, however, is

often an afterthought until a patient notices changes to his or her eyesight. With the most serious diseases and conditions, any lost vision is typically permanent and irreversible. Thus, a health strategy that emphasizes early detection, prevention, intervention, and health promotion is especially critical.

 A Robert Wood Johnson Foundation study[1] ranks eye disorders as the fifth leading chronic condition—requiring ongoing treatment and management over one's lifetime—among those aged 65 years and up and seventh across all age groups. According to the Centers for Disease Control and Prevention (CDC)'s Vision Health Initiative (VHI), available prevalence estimates of serious vision impairments, including blindness and severe vision loss, and eye diseases show that 1.02 million people were blind, 3.22 million people had vision impairment, and 8.2 million people had uncorrected refractive error in 2015.[2] **The VHI also estimates that, by 2050, incidence of diabetes-related eye disease will increase by 72%, rates of cataracts will spike to 87%, and age-related macular degeneration and glaucoma rates will both increase 100% while vision impairment and blindness will increase 150%.[3]** As we age, our eyes undergo many changes that can affect their function and our ability to see clearly. Changes in vision as we age can lead to differentiating between colors, a decrease in visual field (or loss of side vision), difficulty focusing on nearby objects, dry eye, and adjusting to glare when entering dark rooms from outdoors. Vision diseases can further affect these changes in visual function without early identification and effective, timely treatment. Our rapidly aging population and changes in demographics are key drivers of these serious trends of increasing incidence of vision disease and loss; yet, patients continue to face significant barriers in accessing quality, preventive eye care across our national health system.

In children, vision impairments caused by refractive error, amblyopia, strabismus, and/or astigmatism are common conditions among children. Vision disorders affect nearly 13.5 million children in the United States, and are the fourth most common disability in children in the U.S. One in four school-age children and 1 in 17 preschool-aged children have some form of vision problem requiring treatment. Untreated strabismus (crossed eye) and amblyopia (loss of or reduced vision in an eye) affects healthy development and will lead to permanent vision loss without early detection and treatment. **Vision in young children represents a profound intersection between early development and learning success with that of good health.** Healthy sight plays a role in reducing poverty, improving reading readiness, increased graduation rates, attainment of developmental milestones, and positive social relationships; therefore, it must be addressed in an evidence-based way within diverse health and educational settings. Further, there are disparities in access to and utilization of eye care among minority populations, resulting in higher incidence of vision problems without resolution.

The Cost of Vision and Eye Health Problems

Vision impairments are not only potentially devastating to the patient, but they can be incredibly costly if left unaddressed. **Vision impairment, including private and public payments for medical care long-term care, patients' out-of-pocket costs, direct and indirect costs, lost productivity, and consequential lost tax revenue will cost the United States $167 billion in 2019[4]. This figure will to increase to $274 billion by 2032, just as the last ranks of the baby boomer generation will become**

[1] "Chronic Care: Making the Case for Ongoing Care" Robert Woods Johnson Foundation, 2010. https://www.rwjf.org/content/dam/farm/reports/reports/2010/rwjf54583
[2] Centers for Disease Control and Prevention Vision Health Initiative: "The Burden of Vision Loss" (2017). https://www.cdc.gov/visionhealth/risk/burden.htm
[3] Centers for Disease Control and Prevention Vision Health Initiative: "Looking Ahead: Improving Our Vision for the Future" (2017). https://www.cdc.gov/visionhealth/resources/infographics/future.html
[4] "The Future of Vision: Forecasting the Prevalence and Costs of Vision Problems:" NORC University of Chicago (2014)

![Prevent Blindness logo — Bringing Americans to Eye Care]

211 West Wacker Drive | toll free 800.331.2020 |
Suite 1700 | local 312.363.6001 | PreventBlindness.org
Chicago, Illinois 60606 | fax 312.363.6052 |

Medicare-eligible. By 2050, national expenditures on vision impairments and eye disease will surpass $717 billion. The proportion of these costs paid by government programs will, as based on cost projections, increase from 32.6% to 41.4% by 2050.

Additionally, vision impairment and eye diseases often contribute to or result from serious and chronic health conditions, many of which carry a significant cost to the system. This includes diabetes, stroke, depression, social isolation, cognitive decline, and injuries related to falls. **People with vision impairment are more likely to experience other chronic conditions, including hearing impairment, heart problems, chronic kidney disease, hypertension, joint symptoms, chronic low back pain, and stroke as well as falls, injury, motor vehicle collisions, diminished health-related quality of life, and premature death.[5]** Furthermore, a recent analysis of 24,000 hospitalized patients determined that patients with vision loss experienced longer hospital stays and high readmission rates, resulting in $500 million in excess costs. The same study indicated a readmission rate of 23.1% for Medicare enrollees with severe vision loss compared to those without vision loss at 18.7%. Children and their families face a fragmented public health infrastructure that is not adequately addressing their eye care needs. Children's vision problems cost our country $10 billion annually, with families shouldering 45% of these costs. **National surveillance of children's vision and eye health is a significant public health challenge as there is currently no system in place to track screenings, follow-up eye exams, treatment, or outcomes; thus, making it difficult to measure progress and facilitate coordinated care across systems.**

Despite these alarming cost projections and population trends, **for every $18,600 that vision problems cost our country, only a single dollar in Fiscal Year 2019 went toward vision and eye health programs at the Centers for Disease Control and Prevention (CDC) and National Eye Institute (NEI) at the National Institutes of Health (NIH)**. A 2016 study from the National Academies of Sciences, Engineering, and Medicine (NASEM), *[Making Eye Health a Population Imperative: Vision for Tomorrow](#)*, points to the critical role that HHS can have in motivating and coordinating federal government action around improving our national vision and eye health.

Our nation needs coordinated interventions that support key stakeholders and state-based public health systems to expand early detection, prevention, patient support, and research to lessen the burden of vision disorders on working adults and our nation's public health infrastructure. We believe that these strategies are critical in stemming the burgeoning tide of preventable vision loss and ensuring that Americans, through optimal vision, continue to engage with the world around them, see to work and learn, and maintain our independence as we age.

HHS has indicated its interest in focusing on the CDC's Buckets of Prevention, with particular focus on Buckets 2 and 3. Bucket 2 bridges the gap between clinical services and community settings while Bucket 3 focuses on the care interventions that can exist and succeed outside the clinical setting. Below, we have provided responses to HHS's questions outlined in this RFI.

Barriers and Opportunities for Effective Preventative Health
In your estimation, what have been the most significant barriers to more effective prevention and delayed progression of chronic health conditions in the U.S.? Despite extensive evidence suggesting the health benefits of diet and behavior change in preventing chronic health conditions such as obesity and Type 2

---

[5] Vision Impairment and Comorbid Conditions, Centers for Disease Control and Prevention, Vision Health Initiative: https://www.cdc.gov/visionhealth/living/index.html

diabetes, many populations continue to see steady increases in the prevalence of these conditions. Why are more Americans no adopting diet and behavioral changes?

Barriers for effective preventative vision and eye health exist on multiple levels. For individuals, barriers include lack of access to transportation or technological means to access a care setting, cost of obtaining care from a provider and the prescribed course of treatment, understanding care information in one's language or as it is relative to one's culture, or having enough providers in enough care settings to treat patients. Consequential to aging is deteriorating eye health. Attitudes about aging and accepting poor health outcomes as inevitable with getting older preclude early detection and treatment efforts. Globally, 80% of vision impairment is avoidable, and the CDC estimates that diagnosis and early treatment could prevent as much as 98% of visual impairment and blindness in the U.S.[6] In addition, one's ability to prioritize eye health among other costly and burdensome conditions may also pose an access challenge. At the community level, barriers could include lack of public awareness about risk factors for eye disease like family history or behaviors such as smoking, health promotion efforts that exclude vision and eye health information, or public policies that are misaligned with goals for a broader population. At the systems level, lack of adequate surveillance, variations in data collection methods, and no measures of accountability related to vision health, impairment and eye disease make it difficult to track and measure progress, close gaps in access, and achieve equity.

Although vision impairments and eye disorders are often preventable and treatable, public health priorities often leave preventable vision loss on the sidelines despite its importance to overall health and the potential to reduce costs for the patient and across the system. While vision and eye health are considered for standards of care for diabetes management or healthy aging, vision is often a low priority objective without any data collection required. For example, under the CDC's Center for Injury Prevention Stopping Elderly Accidents, Deaths, and Injuries (STEADI) initiative, an algorithm for elderly falls risk screening, assessment, and intervention places a visual acuity check as part of a response for a patient who has experienced two or more falls that resulted in an injury.[7] We believe that not factoring vision and eye health into a risk assessment strategy until after the patient has fallen *twice* represents two missed opportunities at preventing them in the first place. Taken as a singular issue, losing one's ability to see can have a lasting and damaging effect on overall health and quality of life. However, vision and eye health problems have a strong correlation to many other costly chronic health conditions – particularly many that increase in prevalence with age. Older adults with untreated poor vision are more likely to suffer from Alzheimer's disease,[8] cognitive decline, mental health issues, including depression and social isolation, and dementia.[9]

The CDC's Vision Health Initiative (VHI) is a logical organization to address the barriers and opportunities for effective preventative health for individuals, communities, and systems. The VHI, established in 2005 to address the ongoing national vision impairment and eye disease burden, relies on surveillance and epidemiology to conduct public health research and evidence-based public health interventions. In fact, the NASEM report specifically outlines the important role of the VHI in facilitating needed surveillance, public health research and interventions, and building state and local capacity to

---

[6] https://www.cdc.gov/media/releases/2018/a0726-vision-health.html

[7] Algorithm for Falls Risk Screening, Assessment, and Intervention (2017). https://www.cdc.gov/steadi/pdf/STEADI-Algorithm-508.pdf

[8] Rogers et al. American Journal of Epidemiology, "Untreated Poor Vision: A Contributing Factor to Late-Life Dementia," (2010). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2842219/

[9] https://www.ncbi.nlm.nih.gov/books/NBK402367/

Prevent Blindness®
Bringing Americans to Eye Care

211 West Wacker Drive
Suite 1700
Chicago, Illinois 60606

toll free 800.331.2020
local 312.363.6001
fax 312.363.6052

PreventBlindness.org

incorporate vision and eye health at the community level. Specifically, such recommendations for the CDC include:

- Developing a coordinated surveillance system for eye and vision health in the United States,
- Building state and local capacity by prioritizing and expanding the CDC's vision grant program, in partnership with state-based chronic disease programs and other clinical and non-clinical stakeholders, to
  a. design, implement, and evaluate programs for the primary prevention of conditions leading to visual impairment, including policies to reduce eye injuries;
  b. develop and evaluate policies and systems that facilitate access to, and utilization of, patient-centered vision care and rehabilitation services, including integration and coordination among care providers; and
  c. develop and evaluate initiatives to improve environments and socioeconomic conditions that underpin good eye and vision health and reduce injuries in communities.

The VHI needs the most reliable surveillance and epidemiology tool available—CDC's National Health and Nutrition Examination Survey (NHANES)—to track state-level data on vision loss and eye disease, including variances across difference subgroups and demographics, and implement findings into evidence-based, strategic public health interventions at the state and community level. However, due to a continued lack of resources allocated through federal appropriations to the VHI over the past eight fiscal years (FY 2011 – FY 2020), national prevalence estimates of vision impairment and eye disease are over 10 years old with the last use of the NHANES to collect vision and eye health data conducted between 2005 and 2008. It is difficult to assess the current state of our national vision and eye health and project economic and prevalence estimations without updated and accurate information. This data is essential for ensuring access for those who stand to benefit most from innovations in treatment, technology, and other interventions in vision and eye health.

Without the resources to employ the NHANES, the VHI has leveraged existing national surveys to create estimations of our national vision and eye health burden through use of the Behavioral Risk Factor Surveillance System (BRFSS) and American Community Survey (ACS). However, these tools are limited due to variable questioning, data based on self-reported rates of severe vision loss and blindness and not eye disease or vision impairment, and the limited scope of data available. **Equipping the VHI with the resources needed to update national and state-level prevalence estimates of the most serious eye diseases and vision impairments is one of the NASEM report's top priorities.** The work of the CDC's VHI must lead the efforts to align policy to slow the national growth of vision problems, saving both sight and dollars for federal and state governments, as well as private individuals and institutions. Given the national trends that all point to a worsening of our national vision and eye health, now is the time to ensure that the VHI has the resources to eliminate barriers in enacting prevention strategies and create opportunities to incentivize partnerships for the betterment of individuals, communities, and systems.

Furthermore, in children, national surveillance of children's vision and eye health is a significant public health challenge as **there is currently no system in place to track screenings, follow-up eye exams, treatment, or outcomes**; thus, making it difficult to measure progress and facilitate coordinated care across systems. The Maternal and Child Health Bureau at the Health Resources and Services Administration can help address the fragmented public health system that children face through programmatic efforts in developing, coordinating, and promoting best practices and to provide states with

technical assistance to promote children's vision and eye health as an essential component of childhood development and successful learning.

Prevention X Theory of Change

What are some of the most effective, but not well-publicized, prevention strategies… within Buckets 2 and 3 (or anywhere on the continuum between them)? What has been their key successes? Specifically, we are also interested in interventions that have proven effective on a smaller (e.g., health system or community) scale and are candidates for further testing or expansion.

Many public health agencies and their partners (including state, local, tribal, and territorial public health departments, state agencies on aging, disability agencies, nonprofit organizations, and private entities) lack the framework or guidelines to begin to address vision and eye health for individuals, communities, and across the system. Vision and eye health interventions are necessary to build awareness about the importance of preserving vision and eye health, reduce modifiable risk factors, improve timely detection, treatment, and management of vision impairment and eye disorders, and minimize barriers to accessing eye care preventive services and treatments.

Public health agencies and their partners can build capacity to promote vision and eye health through four essential activities:

1. Assess the status of vision and eye health;
2. Build effective partnerships;
3. Implement interventions to enhance vision and eye health; and
4. Assess the impact of vision-related interventions.

Below, we detail successes in each of these essential activities.

Assess the status of vision and eye health: Researchers from The Ohio State University and the Ohio Department of Aging utilized the CDC's support to develop a state burden assessment guides. The researchers used existing sources such as the Behavioral Risk Factor Surveillance System (BRFSS), National Health Interview Survey (NHIS), National Health and Nutrition Examination Survey (NHANES), and American Community Survey (ACS) to build a state vision and eye health profile. Additionally, comorbidities data closed certain gaps in data sources based strictly on vision and eye health to create a comprehensive assessment. With a thorough understanding of risk factors and characteristics of the population, public health agencies and partners can identify ways to improve their population's vision and eye health.

Building effective partnerships: Effective partnerships at the state and local level is vital for promoting vision and eye health. In one such example, the New York State Department of Health successfully identified partners whose current initiatives in chronic disease programs aligned well with the Department's goals for vision and eye health. This not only helped direct limited resources strategically but created sustainable partners across multiple sectors.

Implementing interventions to enhance vision and eye health: Since vision impairment and eye disorders are often preventable, ensuring that everyone in a population, especially the at-risk and underserved, has access to preventative vision and eye care should be a priority. Improving access to

Prevent Blindness®
Bringing Americans to Eye Care

211 West Wacker Drive
Suite 1700
Chicago, Illinois 60606

toll free 800.331.2020
local 312.363.6001
fax 312.363.6052

PreventBlindness.org

these care services will likely encourage people to use them. Below are examples of various interventions focused on promoting access to vision and eye care.

- *Use of mobile eye clinics:* The Kirby Puckett Eye Mobile is a mobile eye clinic that provides free vision screenings for people of all ages in Minnesota communities. The mobile eye clinic also provides comprehensive eye exams, eye health information, and referrals to vision and eye care resources in the local areas they serve.[11]

- *Integrating vision into other preventive services*: Prevent Blindness North Carolina collaborated with the WISEWOMAN program to include vision screening as part of the preventive health screenings offered to low-income women in rural parts of the state after identifying that that low-income African American senior women were not as likely as other population groups to receive vision and eye care services.[14] Prevent Blindness Wisconsin conducts training throughout the state to ensure that public health workers can speak about the importance of vision and eye care and the various eye conditions that can affect older adults. The program, called Healthy Eyes, teaches participants about age-related macular denegation, cataracts, glaucoma, and diabetic retinopathy. These participants are then equipped with a guidebook and tools to provide this education in their own communities.[15]

- *Use of telemedicine:* The University of Virginia (UVA) Health System is expanding its use of telemedicine to help patients across Virginia better prevent or manage chronic conditions. Through the UVA Center for Telehealth, UVA is piloting an intervention to use telehealth technologies to screen patients for diabetic retinal disease.[17]

- *Focus on high-risk, underserved populations:* The Children's Vision Screening Initiative (CVSI), a program offered through the Northern Plains Eye Foundation in South Dakota, provides free vision screenings annually to pre-school and elementary age children and sight-saving surgeries to help underserved individuals regain their vision, mobility, and quality of life.[18]

- Project Better Eye-Health Services & Treatment (BEST), provided through the New Jersey Department of Human Services Commission for the Blind and Visually Impaired, offers vision screening services to children, adults, and migrant workers with a special focus on assisting historically underserved populations, including low income, elderly, minorities, people with diabetes, and those with special needs.[19]

- *Focus on glaucoma:* The Wills Eye Glaucoma Research Center, located in Philadelphia, developed and evaluated a community-based, vision and eye care delivery model in an urban area to detect, treat, and manage people at high risk for developing glaucoma by conducting educational workshops and providing eye exams. The results of this project provide important information on the value of using this community-based strategy for detecting, following, and treating patients with glaucoma or glaucoma suspects in a metropolitan area.[22] Eye Care Quality and Accessibility Improvement in the Community (EQUALITY) is a telemedicine glaucoma detection and management program established by the University of Alabama at Birmingham. The program is deployed in retail-based primary care practices serving communities with high percentages of persons at risk for glaucoma, including African Americans. An evaluation of the project demonstrated that improved knowledge about glaucoma and a high intent to pursue vision and eye care may lead to improved detection of early disease and thereby lower the risk of vision loss.[23]

Assessing the impact of vision-related interventions: Evaluation is important for determining vision and eye health improvement. Evaluation can include stakeholder engagement, a program description for use as a guidepost throughout ongoing evaluation, a systematic approach to evaluation design, credible

evidence, just conclusions, and shared lessons learned with all involved in the intervention and evaluation.

Increasing access to preventive vision care: In the U.S. eye care is often separate from the greater healthcare system, resulting in fragmented care, confusion about how to access vision care, and eye problems going underdiagnosed and undertreated, even when preventable.[10] Medicare coverage does not include routine eye exams, refraction testing, or glasses, except in some medical circumstances or to treat an underlying condition that impacts vision, such as diabetes.[11] Many commercial health insurance plans do not include routine vision care under coverage terms, requiring patients to seek separate vision insurance plans. Close to half of the U.S., population has no vision coverage and another 11% are unsure about their coverage.[12]

We have already outlined the need for stronger investments at the VHI to conduct surveillance and continue assisting states and communities with resources needed to address the needs of their populations. However, in order for projects to be scalable, sustainable, and successful, vision needs consideration as a public health priority given its impact to every American's health, well-being, quality of life, and productivity. Needs assessments regarding transportation, health, community planning, social policy, age-friendly communities, business development, and resource planning conducted at all levels of government should include vision and eye health. Vision and eye health is central to every American's daily lives. We ask that the policies and programs HHS implements through the feedback garnered from this RFI account for its value and potential to improve the health and lives of all Americans.

Conclusion

Once again, Prevent Blindness appreciates the opportunity to comment on the HHS's Prevention X RFI. We stand ready to work with HHS to enhance our national vision and eye health. Please do not hesitate to contact Sara D. Brown, Director of Government Affairs, at (312) 363-6031 or email at sbrown@preventblindness.org if you or your staff would like to discuss these issues further.

Sincerely,
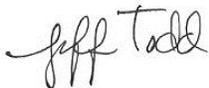
Jeff Todd
President and Chief Executive Officer
Prevent Blindness

---

[10] Elhauge, Einer. Oxford University Press, "The fragmentation of U.S. health care: causes and solutions," (2010). https://clio.columbia.edu/catalog/7718131
[11] https://www.npr.org/sections/health-shots/2018/05/15/611096873/vision-care-lags-with-blind-spots-in-insurance-coverage
[12] Research! America, "Public Perceptions of Clinical Trials," (2017). https://www.researchamerica.org/sites/default/files/uploads/AEVRRApoll.pdf