



## Annual Report 2021

The American Optometric Association (AOA) introduced the Health Policy Institute (HPI) in 2018. The art of informing patients, policymakers, health care professionals and the public on eye health and vision care demands critical research and analysis, together with consistent insight and foresight, as expressed by the HPI. The HPI grew in stature in 2021; in addition to regularly publishing and updating HPI policy briefs, the HPI expanded its role as a thought leader in public policy by establishing optometry (*Diabetes MastersClass*) and paraoptometric (*Navigating Diabetes*) continuing education tracks and providing optometry student class lectures on the use and importance of data (*Data as a Driver to Policy*). Utilizing the talents of AOA senior staff, key leaders, specific experts, and public health student interns, the HPI has proven itself over the past three years and is now considered an invaluable and trusted resource for the profession and the public.

Outputs of the HPI were consistently high throughout 2021, even as the world entered its second year of the COVID-19 pandemic.

---

### ***HPI Sounded the Alarm of a Public Health Threat***

*On Jan. 30, 2020, the HPI published “Doctors of Optometry and 2019 nCoV Novel Coronavirus.” On that same day, the World Health Organization (WHO) declared COVID-19 (then known as 2019 nCoV) a global health emergency. From that day forward, the HPI has meticulously provided accurate, updated COVID-19 information and responded to questions from the eye health and vision care community and the public. This action by the HPI promoted an understanding of the risks associated with COVID-19 and helped ensure a continued ability for doctors and staff to care for patients during the pandemic. Through its inaugural brief, the HPI predicted the likely spread of the novel coronavirus across the U.S., interruptions for schools and the workforce and disruptions in supply chains that could affect optometry offices.*

---

A new phase of the COVID-19 pandemic in 2021 was the recommendation of vaccination booster shots and the emergence of SARS-CoV-2 variants of concern (e.g., Delta and Omicron). COVID-19 vaccines and variants present unique opportunities and health challenges for doctors of optometry and their paraoptometric staff. The HPI aided the understanding of these opportunities and challenges and ensured the continued ability of doctors and paraoptometrics to care for patients, while respecting patient and staff safety and aiding the community wellbeing. [Public Health and Epidemiology of COVID-19 for Doctors of Optometry](#).

In 2021 the Centers for Disease Control and Prevention (CDC) issued new recommendations for wearing a mask in public or physically distancing to protect individuals from COVID-19 disease. The HPI informed doctors that those CDC recommendations were only intended to help individuals make decisions about daily activities after being fully vaccinated for COVID-19, but that they were not intended for health care settings. [Eye Protection, Face Mask and Contingency Planning for Doctors of Optometry and Their Staff in Response to the COVID-19 Pandemic](#). The HPI further detailed new COVID-19 OSHA guidance in *AOA Week in Focus* articles and COVID-19 incidence on [aoa.org/news/Viral & COVID Increases July '21](#) [AOA.org/News Category: States-Clinical Eye Care](#) and *AOA Week in Focus: COVID-19, viral illness surge: What you need to know*.

The HPI sought further information about the impact of the pandemic on optometry practices and patient care, and conducted the *Fourth Survey of Nationwide Pandemic Impact on Optometry Practices*, which opened Sept. 6, 2021, and closed Sept. 30, 2021. The previous three surveys, conducted in April, June and September of 2020, enjoyed robust participation, but the fourth survey received only 97 responses. Doctors who responded reported ongoing challenges in the delivery of eye health and vision care, including deterioration in patient health due to missed care, difficulty rescheduling appointments, staff shortages and permanent changes to practice. However, due to the low response rate, the HPI is not able to publish specific findings, nor comparisons to the data from the three surveys in 2020.

Unfortunately, 2021 confirmed that the diabetes pandemic wrought more severe morbidity and mortality through COVID-19. According to the CDC, in the U.S., 10% of people with diabetes die within seven days of a COVID-related hospitalization. Furthermore, Americans with diabetes and other related underlying health conditions are hospitalized six times more often and are 12 times more likely to die from COVID-19 than those without an underlying condition; and other than cardiovascular disease, diabetes is the most reported underlying health condition among U.S. COVID-19 patients. Research also suggests that COVID-19 and diabetes may be a two-way street. Not only do people with diabetes and COVID-19 suffer disproportionately higher rates of severe outcomes, but it is also possible that COVID-19 is triggering new cases of type 1 or type 2 diabetes or a new type of diabetes, and among people with existing diabetes, it may be triggering severe metabolic complications, such as diabetic ketoacidosis.

---

*In a briefing on Dec. 8, 2021, with Dr. Christopher Holliday, director of the CDC's Division of Diabetes Translation, the HPI asked whether the CDC was developing data sources to understand the impact of COVID-19 on the incidence of type 2 diabetes. For example, is there an increase on conversion of prediabetes to overt diabetes due to SARS-CoV-2 infection among children and adults? Dr. Holliday responded that this was an important question and that data were soon to be published. He further stated that "one in 5 youths between the ages of 12-18 and 1 in 4 youths between age 19-34 have prediabetes."*

---

To better prepare the profession and the public for increased rates of diabetes, the HPI published [Timing of Comprehensive Eye Examination is Vital to Reducing Diabetes Complications](#) and [HPI in the News-](#)

*Review of Optometry: ODs in Four States Get Green Light to Administer COVID Vaccine and [Making a village - Diabetes, 2021 AOA November/December AOA Focus publication.](#)*

Together with increasing rates of diabetes and the need for diabetes team care, the HPI researched the bilateral integration of optometry diabetes care (e.g., clinical management, education, prevention and support) through Diabetes Care and Education Specialists. HPI Published: [Diabetes Clinical Management, Education, Prevention and Support Bilaterally Integrated through Optometry and Diabetes Care and Education Specialists](#). The HPI additionally collaborated with the Association of Diabetes Care and Education Specialists and moderated a recorded panel discussion of experts (*Diabetes MastersClass Part 2*) for a certified one-hour optometry CE credit available through AOA EyeLearn.

As the COVID-19 pandemic entered a new phase in 2021, the HPI responded with its own analysis highlighting children missing in-person school and the ramifications of increased screen time and sedentary behavior. As the need to cover missed academic material became apparent, the HPI viewed this as the opportune time for much-needed change in vision-care prevention strategies. Problems with children’s vision preclude or limit lifelong academic, extracurricular and social success and were being exacerbated by the COVID-19 pandemic. Research indicates undetected and untreated vision disorders cause students to miss the equivalent of 135 days of school content annually. The HPI reported that these vision challenges were made worse by the COVID-19 pandemic but could be remedied with needed policy change. [COVID-19 Pandemic Highlights Urgency of Addressing Children Missing School: Poor Vision Alone Accounts for Missing 135 Days of School Content Annually](#) and [The Misnomer “Vision Screening” is Interfering with Children Receiving Essential Vision Care in the U.S.](#)

In areas of clinical care apart from COVID-19, the highest birth rate is now represented by women age 30–34. Coincidentally, the average age of contact lens wearers worldwide is 31, and the majority are female, setting the stage for the HPI brief: [Crucial Contact Lens Considerations During Pregnancy](#).

In 2021, the HPI conducted an analysis of the most prominent billing codes used by doctors of optometry. This analysis identified 3,123,415 E/M Part B Medicare services (fee-for-service) reported by doctors of optometry in 2019, representing a 0.5% increase from 2018. Broken down by provider type, these HPI data revealed improper payments to ophthalmology at a rate of over 10 times that of optometry (e.g., \$15.7M as compared to \$162.3M) in 2019: [Trends in Procedures Provided to Medicare Beneficiaries by Doctors of Optometry](#)

In 2021, the HPI highlighted a professional reporting opportunity through The Food and Drug Administration (FDA) MedWatch system for doctors of optometry to 1) share information for the benefit of patients and the advancement of human knowledge and welfare; 2) protect the health and welfare of society; and 3) participate actively, as primary health care providers, in efforts that enhance the eye, vision and general health of patients and the public. The HPI brief highlights opportunistic reporting methods that could be the critical action by optometry that prompts a modification in use or design of a product, improves its safety profile and leads to increased patient safety and improved public health. [Optometry Making the Most of FDA’s MedWatch](#).

In 2021, the HPI also saw a unique opportunity to improve health through point-of-care testing, describing a framework to improve patient care services by offering laboratory test results on a real-time basis, on-site at optometry clinics, for the betterment of patient-centered care. [Advancing Patient Care through POCT and CLIA](#).

In 2021, the HPI developed a new category for HPI briefs “[Children’s Vision](#)” and revamped its HPI [website](#) to improve searches and to better link its content to other AOA areas of interest.

## HPI Epidemiology Studies, Policy Development and Translation

**Domain: Health Care Reform and Access to Care:** *COVID-19 Pandemic Highlights Urgency of Addressing Children Missing School: Poor Vision Alone Accounts for Missing 135 Days of School Content Annually (March 2021), Timing of Comprehensive Eye Examination is Vital to Reducing Diabetes Complications (July 2021), Diabetes MastersClass-Looking Forward in Diabetes Care (February 2021-HPI recorded webinar).*

**Domain: Medicare, Medicaid & Veterans Health:** *Trends in Procedures Provided to Medicare Beneficiaries by Doctors of Optometry (December 2021).*

**Domain: Public Health Promotion & Disease Prevention:** *Crucial Contact Lens Considerations During Pregnancy (March 2021), The Science of Reading Begins with Vision (July 2021), Optometry Making the Most of FDA's MedWatch (October 2021), Diabetes Clinical Management, Education, Prevention and Support Bilaterally Integrated through Optometry and Diabetes Care and Education Specialists (November 2021), NAVIGATING DIABETES: Vision, Eye Health and Wellness Facilitated by Paraoptometrics (November 2021).*

**Domain: Controlling Costs & Improving Effectiveness:** *The Misnomer "Vision Screening" is Interfering with Children Receiving Essential Vision Care in the U.S. (April 2021), Advancing Patient Care through POCT and CLIA (October 2021), Diabetes Clinical Management, Education, Prevention and Support Bilaterally Integrated through Optometry and Diabetes Care and Education Specialists (November 2021- HPI recorded webinar)*

**Domain: Serving Communities & Workforce Development:** *Data as a Driver to Policy for Optometry & The Diabetes Example (March 2021-HPI recorded student webinar)*

**Domain: Children's Vision:** *COVID-19 Pandemic Highlights Urgency of Addressing Children Missing School: Poor Vision Alone Accounts for Missing 135 Days of School Content Annually (March 2021), The Misnomer "Vision Screening" is Interfering with Children Receiving Essential Vision Care in the U.S. (April 2021), The Science of Reading Begins with Vision (July 2021).*

## AOA HPI 2021

### Chair:

Steven A. Loomis, O.D.

### Research Team:

Michael Dueñas, O.D., F.N.A.P. (*lead scientific writer*); Deirdre Middleton; Andy Morgenstern, O.D., F.N.A.P.; Rodney Peele, J.D. (*director*); Jennifer Spangler, M.P.H., M.B.A.; Susan Thomas.

Visit us at: [aoa.org/hpi](http://aoa.org/hpi)