Access to health care has been traditionally viewed as the ability to see a physician or to be hospitalized if necessary in the presence of a health state that may benefit from care in prevention, treatment, amelioration, or palliation. Information from national databases such as the National Ambulatory Care Medical Survey reporting on samples of visits from physician offices around the United States or from the Medicare claims data provides valuable insight about the status of eye care use in the United States, particularly for adults. National Ambulatory Care Medical Survey data from 2004 (the most recent year available) show that there were 47.3 million visits (SE of estimate, ±7.0 million visits) across all age groups to ophthalmologists’ nonhospital-based offices, constituting 5.2% of all such visits and a rate of 16.4 visits per 100 persons in 2004. There were a total of 43.6 million visits for eye and ear symptoms, with 11.1 million (SE, ±2.2 million) referable to vision dysfunction symptoms. As might be expected, visit rates are traditionally higher for elderly persons, with nearly 50% of those aged 65 years and older having at least 1 eye visit in any given year in Medicare. In comparison, annual rates of eye care use have been estimated from the National Health Interview Survey to be 7.3% (95% confidence interval, 6.0%-8.6%) of those aged 0 to 5 years and 24.8% (95% confidence interval, 23.5%-26.2%) among those aged 6 to 17 years. Across all age groups, female sex was associated with greater use or likelihood of use of eye care services.

The first key question is, do these data represent overuse, underuse, or appropriate access and use of eye care services? If they represent overuse of services, then functionally there is no traditional access problem but a problem of incurring unnecessary adverse effects of unneeded treatment and the associated costs to patients, payors, and society. If they represent underuse, then access problems do exist and need to be addressed. Fortunately, within eye care services, significant data from studies can help address this question.

First, among elderly persons (who constitute the largest age group of patients for ophthalmologists), having more regular eye care expressed as a greater number of years of having at least 1 eye care visit is associated with a significantly lower risk of developing new limitations in both activities of daily living and instrumental activities of daily living. However, we know that almost 30% of elderly persons who survive 5 years in the Medicare program (the vast majority of whom see other providers) never see an eye care provider in that time. Further, among those who use the system at least once in a 5-year period, most do not use it regularly, even among those diagnosed with potentially blinding conditions for whom care and treatment have been demonstrated to reduce the rates of subsequent vision loss. Thus, for elderly persons, it is clear that...
major consequential issues exist in accessing eye care, with significant adverse impacts on at least patients and their families.

Second, among children, data by Kemper et al using the Medical Expenditure Panel Survey demonstrated that in 1998, 25% of children between the ages of 6 and 18 years had corrective lenses for refractive error or other reasons. As with adults, variation in rates of eye care use and use of treatments occurred, dependent on factors such as income, sex, race or ethnicity, and insurance status. However, despite this significant prevalence, analysis of patterns of eye care use among children in Michigan under the Medicaid program by Kemper et al found that only 3% to 9% of children between those ages had an eye examination during a 1-year period in which lens services were provided. Although there is no definitive evidence yet on the frequency at which lens prescriptions should be monitored, the disparity evidenced here strongly suggests that gaps in eye care use do exist among children.

Although there are much less direct data on adults between the ages of 19 and 64 years, particularly those younger than 40 years, population-based studies from Baltimore, Md, Los Angeles, Calif, Beaver Dam, Wis, and elsewhere demonstrate that visual loss and impairment occur in this group as well. Further, the rates of blindness and visual impairment are still more than 60% of the rate of those aged 65 to 69 years (and 33% of the rate per 100 persons of the US adult population older than 40 years overall). As such, because much of the blindness and low vision in the United States arise from causes that can be effectively treated to prevent vision loss, there are likely to be gaps in the care process today that result in such vision loss in this age group as well.

From what is known in the literature, it is clear that there are indeed gaps in access and use of eye care services that would benefit our population. Addressing these needs will require the combined efforts of all segments of our society. Efforts on the part of private charitable organizations, governmental agencies, health care providers, and individuals will be required. For its part in recognition of these challenges and opportunities, the American Academy of Ophthalmology (AAO) has adopted since 1991 an official policy statement on helping to meet the needs of the medically underserved. The following is the policy of the AAO and the Foundation of the AAO:

To encourage its membership to participate in those initiatives that promote awareness of eye disease and offer access to affordable quality medical and surgical eye care. Through EyeCare America, the AAO's national public service program, Academy membership is offered an opportunity to participate in a major, nationally recognized promote-respond and referral system that provides access for the medically underserved.

The EyeCare America program has been in existence since 1985 and has several components, including the Seniors EyeCare, Glaucoma EyeCare, Diabetes EyeCare, Age-Related Macular Degeneration EyeCare, and Children’s EyeCare programs. In the Seniors EyeCare Program, the prototype of all of the programs, US citizens or legal residents aged 65 years and older who do not belong to a health maintenance organization or the Veterans' Affairs system and have not seen an ophthalmologist in 3 or more years are referred to volunteer ophthalmologists for a free examination and up to a year's worth of physician care at no out-of-pocket charge to the patient. Because these patients will be eligible for Medicare or Medicaid, the AAO has since 1985 had a waiver from the Health Care Finance Administration (now Centers for Medicare and Medicaid Services) relative to the waiver of co-pay and deductible requirements. Through March 2006, the various programs under the EyeCare America umbrella have provided direct service, including referrals for care, free patient education materials, and help obtaining eye care resources not offered through EyeCare America to more than 500,000 Americans, with 7341 active ophthalmologist volunteers enrolled in 2006. Another 307,000 Americans have contacted the program to receive general program information or to determine their eligibility. With partnership support from industry as well as Foundation support from philanthropic giving, the various EyeCare America programs are projected to continue to grow and provide more access to care for patients who otherwise would find it difficult to obtain specialty eye care.

As official policy, the AAO also “encourages the development of local programs by ophthalmologists that provide care for indigent and medically underserved populations.” As part of its program in this area, the AAO has awarded up to 2 or 3 Humanitarian Awards at an annual meeting in recognition of the work done by its membership both in the United States and abroad. Having served on the awards committee for the AAO, we have seen that far more ophthalmologists are worthy of the awards than can be recognized each year.

The AAO is also cognizant of the fact that just providing avenues of accessing ophthalmologists is insufficient to meet the needs of our people. Ongoing efforts are also focused on several other areas. First, efforts are under way to increase the follow-through rate of examinations for those who are referred within the EyeCare America family of programs; currently, fewer than 50% of those referred actually have care documented subsequently. Second, the AAO has supported legislation to enhance vision assessments in children by bringing together pediatricians, eye care providers, and interested organizations such as Prevent Blindness America to provide multiple avenues of vision assessment for children and their parents.

Third, the EyeCare America programs are implementing linguistically and culturally appropriate approaches to patient communications and care, in line with work emphasizing the importance of such approaches. Fourth, the AAO and its partners have worked actively through the legislative process to bring about greater use of eye care services by at-risk groups, including the creation of a glaucoma detection screening benefit under Medicare for those in higher-risk groups.

Perhaps most importantly, looking to the future, the AAO is aware...
of the coming pressures created by the demographics of the baby boomers and other factors that will alter the health care landscape. With concerns about a physician workforce shortfall relative to market demand in 2020,12 many physician organizations have sought to increase the numbers of physicians over the next 20 years to help meet anticipated market needs. Given the long lag time to train new providers to become available to provide care as well as the longer-term concern of potential declining population needs after the baby boomer generation, it is not clear that a strategy to increase physician supply is necessarily the only appropriate course. Instead, within ophthalmology, concerns about a surplus of eye care providers in the recent past13 combined with continued enhancements in care for the most common conditions such as cataract and retinal diseases suggest an alternative approach to ensure greater access for more people in the future. Through improved efficiencies, enhanced productivity, and new work and business models of seeing patients, we can provide new avenues to more rapidly and effectively address the access needs of the American public as they grow in the short and longer term. Indeed, in a 2005 survey of its members, the AAO learned that 52% of members would like to see, on average, 33% more patients, whereas 48% and 43% of members felt that their area had the right amount or too many ophthalmologists, respectively. Only 4% of members felt there were too few ophthalmologists.

Addressing this challenge is going to require the innovation and involvement of all eye care professionals. Efforts to incorporate the work of optometrists, technicians, and other health care providers into an integrated systems approach may become one important element of meeting these needs. By focusing on methods and tools that will help ophthalmologists continue and indeed further enhance the productivity growth in work that has already occurred over the last 10 years, the AAO is committed to ensuring that patients will be able to receive the needed eye care they seek. By aiming to implement the principles of having the right person do the right task at the right time, a staple of American and indeed global business as well as quality improvement, future systems will be better able to meet the needs of our population. As such, our profession may well need to restructure in fundamental ways the processes by which we provide eye care to meet these challenges.

As part of this, the AAO is in the process of creating specific programs and measures to enhance the ability and productivity of all ophthalmologists to provide more efficient care in a high-quality and patient-friendly manner. Key elements of this program are the following: (1) to develop, in collaboration with experts, consultants, and particularly the American Association of Ophthalmic Executives, key indicators and then benchmark metrics for understanding the way ophthalmic practices care for patients; (2) to help members understand the factors that are likely to impact eye care over the next 25 years and their potential impacts; (3) to assist members in understanding, applying, or transitioning business models to meet these needs over the next 25 years; and (4) to facilitate communications among members to enhance the understanding and use of successful models of care around the country. In addition, the AAO will continue its emphasis on the transfer of education and skills to enhance the practices of ophthalmologists and thence the lives of patients by greater application of modern innovations sooner. Our success in doing these and myriad other tasks will be critical to improving the access of the American public to appropriate quality eye care. At the outset, we asked whether there was too little or too much use of care—we now know that our largest challenge will be to ensure that all Americans have the ability to receive the eye care that will help them seek to fulfill their lives.

Submitted for Publication: October 9, 2006; final revision received December 8, 2006; accepted December 11, 2006.
Correspondence: Paul P. Lee, MD, JD, Department of Ophthalmology, Duke University Eye Center, 3802 Erwin Rd, Box 3802, Duke University Medical Center, Durham, NC 27710 (lee00106@mc.duke.edu).
Financial Disclosure: Dr Lee is a consultant to Allergan, Pfizer, and Alcon, has received research support from Merck, Allergan, and Pfizer, and has received travel funds from Alcon, Pfizer, and Allergan.

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